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The purposes of this study were: use hospital patient records to develop accurate and reliable data on the magnitude and character of hospital-admitted poisoning cases, and to develop for the first time nationwide incidence rates for hospitalized acute pesticide poisoning cases among those persons admittd to general-care hospitals.

The study design omitted victims of undiagnosed pesticide posioning, emergency-room patients who are not assigned a hospital bed, and patients treated by physicians outside the hospital environment.

Acute poisonings by pesticides are a continuing problem in the United States. All pesticides are considered toxic and can cause illness or even death when misused. The toxicity of a pesticide, route of exposure, or formulation, as well as the age, sex, race, and physical and/or mental health status of the user may play an important role in resulting morbidity or mortality.

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OFFICE OF PESTICIDE PROGRAMS
U.S. ENVIRONMENTAL PROTECTION AGENCY
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# NATIONAL HOSPITAL STUDY OF ACUTE PESTICIDE POISONINGS ADMITTED TO GENERAL CARE HOSPITALS

## CHAPTER I

## INTRODUCTION AND LITERATURE REVIEW

Acute poisonings by pesticides are a continuing problem in the United States. All pesticides are considered toxic and can cause illness or even death when misused. The toxicity of a pesticide, route of exposure, or formulation, as well as the age, sex, race, and physical and/or mental health status of the user may play an important role in resulting morbidity or mortality (1).

Except for acute hospitalized cases, morbidity data related to pesticide poisonings are not so readily available nor so reliable as are mortality data. Much of the problem lies in the lack of an adequate definition for pesticide poisoning. Some researchers believe that nonfatal cases may legitimately range from exposure leading to no illness, to exposure resulting in severe symptomatology and permanent physical damage; others think that only cases resulting in significant illness should be identified as a pesticide poisoning (2,3).

It has been estimated that mortality resulting from pesticide intoxication approaches one death per million population annually, and that pesticides are responsible for approximately 10 percent of all deaths associated with the ingestion of a foreign substance, i.e., a liquid or solid (3,4). Hayes and Pirkle reported a total of 111 pesticide poisoning deaths in the United States in 1961; 69.4 percent of the victims were white and 30.6 percent black (5). Furthermore, more than 51 percent of the observed deaths occurred in the 10 year age group. It has been estimated that more than 50 percent of the deaths among children involved misuse (6). Davies reported 25 deaths related to pesticide exposure in the greater Miami, Florida, area between January 1963 and August 1965; 36 percent of the victims were children (7). California, which maintains accurate records on pesticide poisonings related to occupational exposure, reported 38 deaths between 1951 and 1970 (7).

In 1970 McLeod reported on 107 pesticide poisonings treated at Charity Hospital in New Orleans, Louisiana, from 1965 through 1967. Lisella et al. reported on 67 pesticide poisonings in Linn County, Iowa, 1965-68. In a 1970 survey of Arizona physicians, Morgan and Roan reported that 148 physicians treated 469 pesticide poisonings; and in a 1971 survey conducted by the Colorado Pesticide Study (8,9), Colorado physicians reported treating 154 pesticide poisonings. Reich et al. noted that in a six-year period (1960-1966), 275 acute pesticide poisonings were reported in the lower Rio Grande Valley of Texas (10).

Data on acute pesticide poisonings accumulated in such a manner do not represent a national picture but they do provide a rough assessment of poisonings reported in varied geographic regions, through a diverse and complicated reporting mechanism. To compound the situation, there is no recognized reporting mechanism suitable for the systematic identification, characterization, and reporting of pesticide poisonings. What does exist is a diverse mixture of reporting by State and Federal agencies, scientific investigators, consumer groups, and private citizens. For example, in 1974 the Pesticide Episode Review System (PERS) reported 1561 human pesticide poisonings. PERS is a voluntary reporting system that collects, collates, and reports pesticide poisoning data from such sources as State health departments and poison control centers. The State of California, with its mandatory reporting system related to workmen's compensation and the payment of a physician's fee for treatment, reported on more than 1100 pesticide poisoning cases in 1974 (7). If these figures are accurate then California apparently accounts for more than 70 percent of all human pesticide poisonings reported to that system. A more reasonable explanation is that PERS is inadequately reported. Regardless of the problems associated with the reporting methods, it is clear that pesticide poisonings pose a significant threat to human health.

## CHAPTER II

## PURPOSE AND SCOPE

There is no reliable system capable of reporting, collecting, collating, and disseminating accurate information on the status of pesticide poisonings in the United States today. Not only is the collecting and reporting system complex and confusing; it simply does not work effectively. Even if the system reporting inputs were in concert and working, there are little, if any, accurate data on the morbidity and mortality of pesticide poisonings available to report. It is virtually impossible, without demanding cooperation from physicians treating pesticide poisonings, to develop reliable figures on cases treated outside the environs of a general-care hospital. Records of acute pesticide poisoning cases admitted for treatment provide the best potential for a reliable data source. Hospitals of the American Hospital Association must maintain a current and complete medical record on each patient. Records contain the patient's identifying data and consent forms, medical history, record of physical examination, physicians' progress notes, operative notes, nurses' notes, routine x-ray and laboratory reports, doctors' orders, and final diagnosis (11). Furthermore, to be listed as an acute hospitalized pesticide poisoning case requires that a patient see a physician; that the physician be adequately familiar with pesticide poisonings for a correct diagnosis; and that the patients' illness be severe enough to require hospitalization.

The purposes of this study were: use hospital patient records to develop accurate and reliable data on the magnitude and character of hospital-admitted poisoning cases, and to develop for the first time nationwide incidence rates for hospitalized acute pesticide poisoning cases among those persons admitted to general-care hosptials.

The study design omitted victims of undiagnosed pesticide poisoning, emergency-room patients who are not assigned a hospital bed, and patients treated by physicians outside the hospital environment.

# CHAPTER III

# METHODS

The objective of the study, as stated in Chapter II, was to develop nationwide incidence rates for hospitalized acute pesticide poisoning cases among those persons admitted to general-care hospitals. The sample population were patients in the approximately 7,000 general-care hospitals in the United States. A hospital is classified general care by the American Hospital Association (AHA) if the majority of its admissions are general medical and surgery cases (11).

Hospitals were the primary sampling units. From a complete list of general-care hospitals in the United States a sample was selected according to the following design. Each hospital represented a cluster of admissions. Once a hospital was selected the entire cluster was observed in order to count the number of pesticide cases occurring within the cluster. To increase precision of the estimates, the population of general hospitals was stratified according to: pesticide practices in their respective areas defined as low use or high use, and hospital size within each use level, State, and Epidemiologic Studies Program (ESP) center of Excellence.

From this sampling frame the study was selected. The stratification plan is shown on the following pages.

USAGE LEVELS

| Low | | High | |
|---|---|---|---|
| Admission Rate | | Admission Rate | |
| | Hospital 1 | | Hospital 1 |
| $\leq A_1^L$/yr. | Hospital $N_1^L$ | $\leq A_1^H$/yr. | Hospital $N_1^L$ |
| $\vdots$ | Hospital 1 | $\vdots$ | Hospital 1 |
| $\leq A_m^L$/yr. | Hospital $N_m^L$ | $\leq A_m^H$/yr. | Hospital $N_m^H$ |

The stratum boundaries, i.e., $A_1^L$, $A_2^L$,..., $A_m^L$, and the number of hosptials sampled within each area were determined by the actual distribution of admission rates for the hospitals included in the sampling frame. The allocation of the sample to each stratum was constructed so that each stratum had at least some limiting lower sampling rate. The number of hospitals to be sampled within a high-use or low-use area of a State was determined in the following manner. The hospitals within a given use stratum were ranked according to admissions and then divided into $k$ quantiles, where $k$ is the number of hospitals to be selected. The $k$ quantiles, containing approximately the same number of hospitals, constitute the admissions strata. Within each stratum one hospital was selected at random. Although the probability of obtaining a given sample under this plan is approximately equivalent to the probability of obtaining the sample using simple random sampling, this procedure ensures that the distribution of admissions into the sampled hospitals will be representative of the distribution of admissions into all hospitals in the same use stratum.

Estimates of the incidence rate of hospitalized pesticide poisonings should take the sampling design into account. Of the many ways to estimate the incidence rate in stratified random sampling (Cochran, 1963), two of the more natural estimators are the combined ratio estimate

$$\hat{Y}_c = \left( \frac{\sum\limits_{h=1}^{n} \frac{N_h}{n_h} y_h}{\sum\limits_{h=1}^{n} \frac{N_h}{n_h} x_h} \right) X$$

and the stratified ratio estimate

$$\hat{Y}_{ST} = \sum_{h=1}^{n} \frac{X_h}{x_h} y_h \quad .$$

Within a given use stratum of a State, $\hat{Y}_c$ and $\hat{Y}_{ST}$ are estimates of the total number of hospitalized poisonings, $n$ is the number of admissions strata, and $x$ is the total admissions of all hospitals within the use stratum. Within the hth admissions stratum, $N_h$ and $X_h$ are, respectively, the number and total admissions of all hospitals, $n_h$ and $x_h$ are the number and total admissions of the sampled hospitals, and $y_h$ is the number of observed hospitalized pesticide poisonings in the hth admissions stratum.

Although the stratified ratio estimate does not require the assumption that the true incidence rate remains constant from stratum to stratum it is susceptible to bias if the sample size within each stratum is small. Since typically only one hospital was selected within each admissions stratum this problem of bias arises. A better estimate of the incidence rate would be obtained by using the combined ratio estimate $\hat{Y}_c$, which is less susceptible under these circumstances. However, because typically only one hospital within each admissions stratum is selected, the variance of $\hat{Y}_c$ cannot be directly estimated. Because the sampling plan renders the ratio $N_h/n_h$ approximately constant over admissions strata, the combined ratio estimator is approximately equivalent to the simple ratio estimator

$$\hat{Y} = \left( \frac{\sum_{h=1}^{n} y_h}{\sum_{h=1}^{n} x_h} \right) X.$$

The estimator $\hat{Y}$ arises from ignoring stratification by admissions and therefore assumes that the true incidence rate is constant over admissions strata. Since the probability of selecting a given sample under the sampling scheme is approximately equivalent to the probability of selection under simple random sampling, the variance of $\hat{Y}$ assuming simple random sampling should be a good approximation to the variance of $\hat{Y}$ based on the sample design. Because $\hat{Y}$ is approximately equivalent to $\hat{Y}_c$, and because an estimate of the variance of $\hat{Y}$ can be obtained, it was decided to use $\hat{Y}$ to estimate the incidence rate of hospitalized pesticide poisonings within a given use stratum within a State.

Thus , for each year from 1971 to 1973, the sample was stratified. Main strata were the States and substrata were the pesticide use levels, either low or high. Because this report provides incidence rates for the 10 subdivisions of the Nation designated as U.S. Environmental Protection Agency (EPA) regions, the following notation will be used when subpopulation refers to all general hospitals, i.e., AHA Class 10 hospitals, within a given pesticide use area of a given State for a given year.

Within the $u^{\underline{th}}$ pesticide use class of the $s^{\underline{th}}$ state of EPA region r:

$n_{rsu}$ denotes number of hospitals sampled.

$N_{rsu}$ denotes number of hospitals in the sampled subpopulation.

$x_{rsui}$ denotes admission of the i^th^ sampled hospital.

$y_{rsui}$ denotes number of cases seen in the i^th^ sampled hospital.

$x_{rsu}$ denotes admissions of all $n_{rsu}$ sampled hospitals.

$y_{rsu.}$ denotes total number of cases seen in all $n_{rsu}$ sampled hospitals.

$X_{rsu}$ denotes total admittance of all the hospitals in the subpopulation.

$P_{rsu} = \frac{y_{rsu.}}{x_{rsu.}}$ denotes proportion of total cases to total admittance for sampled hospitals.

Within the u^th^ use class within the s^th^ State of EPA region r, the estimated incidence, in terms of the number of admissions to the subpopulation, is

$$\hat{Y}_{rsu} = P_{rsu}\, X_{rsu}.$$

Per 100,000 admissions, the estimated incidence rate is

$$\hat{R}_{rsu} = 100{,}000\ P_{rsu}$$

Since the estimators of the incidence rate are simple ratio estimators, the estimated variances of the estimators are:

$$V[\hat{Y}_{rsu}] = \frac{(N_{rsu} - n_{rsu})\, N_{rsu}}{n_{rsu}\,(n_{rsu} - 1)} \sum_{i=1}^{n_{rsu}} (y_{rsui} - p_{rsu}\ x_{rsui})^2$$

$$V[\hat{R}_{rsu}] = \left(\frac{100{,}000}{X_{rsu}}\right)^2 V[\hat{Y}_{rsu}]$$

Because the true incidence rate may not be constant among use strata or States, the appropirate estimate of incidence over a combination of use strata is the sum of the estimates of incidence for each use stratum. Since the use strata are considered independent, the variance of the estimate over the combination of strata would be the sum of the variances of the estimates of each stratum. Hence the estimated incidence rate for the $u^{\underline{th}}$ pesticide use class within the $r^{\underline{th}}$ EPA region is

$$\hat{Y}_{r\cdot u} = \sum_{s=1}^{n_{r\cdot u}} \hat{Y}_{rsu},$$

with estimated variance $V[\hat{Y}_{r\cdot u}] = \sum_{s=1}^{n_{r.u}} V[\hat{Y}_{rsu}]$ .

Expressed in terms of 100,000 admissions the incidence is

$$\hat{R}_{r\cdot u} = \left(\frac{\hat{Y}_{r.u}}{X_{r.u}}\right) \times 100{,}000;$$

the variance of this estimator is given by

$$V[\hat{R}_{r.u}] = \left(\frac{100{,}000}{X_{r.u}}\right)^2$$

Incidence rates for various combinations of substrata were also estimated: for example, the incidence rate for Maine as a whole, or the incidence rate for the area composed of low usage regions of Maine, Vermont, and New Hampshire. For each substratum (use within State) in the region of interest, authors obtained the following values: $X_{rsu}$, the total admissions of all hospitals in the subpopulation; $\hat{Y}_{rsu}$, the incidence rate in terms of $X_{rsu}$; and $V[\hat{Y}_{rsu}]$, the associated variance. By summing all the $\hat{Y}_{rsu}$, $V[\hat{Y}_{rsu}]$, and $X_{rsu}$ of all substrata in the region of interest, authors obtained the following: X, the total admissions of all hospitals in the regions; $\hat{Y}$, the estimated incidence for the region expressed in terms of X; and $\hat{V}$, the estimated variance of $\hat{Y}$.

In terms of 100,000 admissions the estimated incidence for the region is

$$\hat{R} = \frac{100,000}{X} \hat{Y},$$

which has variance

$$V(\hat{R}) = \left(\frac{100,000}{X}\right)^2 \hat{V}.$$

The State of Colorado, for example, was computed as follows:

Let $y^L$ = total hospitalized acute pesticide poisoning cases per year in the low usage area of Colorado.

$X^L$ = total admissions/year for all general hospitals in the low usage area of Colorado.

$x^L$ = total admissions/year for the sampled hospitals in the low usage area of Colorado.

The estimate of the total number of hospitalized acute poisoning cases for the low usage area of Colorado is then

$$\hat{Y}^L = \frac{X^L}{x^L} y^L.$$

Similarly, with an obvious change in notation, the estimate for the high usage area is

$$\hat{Y}^H = \frac{X^H}{x^H} y^H .$$

The estimate for Colorado would then be given by

$$\hat{Y} = \hat{Y}^L + \hat{Y}^H .$$

The estimate for other regions follows from subregions such as this.

Besides total incidence ($\hat{Y}$ and $\hat{R}$) it was desirable to obtain incidence rates for various parts of the population. For example, the incidence rates of intentional and accidental poisonings were of interest as were incidence rates for various age groups in the population.

Calling y the total number of cases observed, $y_o$ the number of cases of the type of interest and $\hat{Y}$ and $\hat{R}$ the estimated incidence rates over the collection of relevant substrata, the estimated incidence for the cases of interest are

$$\hat{Y}_o = \frac{y_o}{y}\hat{Y} \text{ and } \hat{R}_o = \frac{y_o}{y}\hat{R} .$$

To estimate, for example, the incidence of hospitalized pesticide poisonings over both high and low usage levels in EPA Region I in 1973, authors proceeded as follows:

For the $u^{\underline{th}}$ pesticide use class within the $s^{\underline{th}}$ State in Region I estimate $\hat{Y}_{1su}$ and obtain $V[\hat{Y}_{1su}]$. Calling $x_{1\cdot\cdot}$ the total admissions of all general care hospitals in Region I, and $n_{1\cdot u}$ the number of sampled hospitals in the $u^{\underline{th}}$ pesticide use class within Region I, estimate the incidence for Region I in terms of $X_{1\cdot\cdot}$ as

$$\hat{Y}_{1\cdot\cdot} = \sum_{u=1}^{2} \sum_{s=1}^{n_{1.u}} \hat{Y}_{1su}$$

which has variance

$$V[\hat{Y}_{1\cdot\cdot}] = \sum_{u=1}^{2} \sum_{s=2}^{n_{1.u}} V[\hat{Y}_{1su}].$$

Per 100,000 admissions the estimate becomes

$$\hat{R}_{1\cdot\cdot} = \frac{100,000}{X_{1\cdot\cdot}} \hat{Y}_{1\cdot\cdot}$$

which has variance

$$V[\hat{R}_{1..}] = \left(\frac{100{,}000}{X_{1..}}\right)^2 V[\hat{Y}_{1..}] .$$

With $y$ acute pesticide poisonings observed in Region I, of which $y_I$ were intentional and $y_A$ involved children under the age of 5 years, then the estimates, in terms of $X_{1..}$, are

$$\hat{Y}_I = \frac{y_I}{y} \hat{Y}_{1..} \quad \text{intentional poisonings}$$

and $$\hat{Y}_A = \frac{y_A}{y} \hat{Y}_{1..}, \quad \text{poisonings, both intentional and accidental, involving children under five years.}$$

In terms of 100,000 admissions the estimates are, respectively,

$$\hat{R}_I = \frac{y_I}{y} \hat{R}_{1..} \quad \text{and} \quad \hat{R}_A = \frac{y_A}{y} \hat{R}_{1..} .$$

The above procedure presumes knowledge of the admissions of each sampled hospital and the total admissions of all hospitals in each use level for every State; for 1973 these are known. The total number of admissions to all hospitals in the United States was available.

For 1972 and 1971, only, incidences were estimated as described above except that the total admissions for both the sampled hospitals and all hospitals in the subpopulation within each use class of each State were estimated as their 1973 values times a constant. The constant K was the total national admissions for the year in question divided by the total national 1973 admissions. For example, using $x_{73}$ and $X_{73}$ to denote total admissions for the sampled hospitals and all hospitals in the Maine subpopulation exposed to high pesticide use in 1973, authors estimate $x_{rsu}$ and $X_{rsu}$ for that substratum for 1972 as $\hat{x}_{rsu} = x_{73}K$ and $\hat{X}_{rsu} = X_{73}K$. If $y$ is the number of cases seen in that substratum in 1972, the incidences are $\hat{R} = (y/\hat{x}_{rsu})\, 100{,}000$ and $\hat{Y} = y\hat{X}_{rsu}/\hat{x}_{rsu}$.

No estimate of variance is made. This procedure assumes that the rate of change in admissions is constant among all hospitals in the sense that the ratio of the admissions of sampled hospitals to the admissions of the subpopulation hopsitals within every pesticide use class of every State remains approximately constant from year to year. If this assumption does not hold then the estimates will be biased.

A more detailed discussion of such ratio estimates in stratified random sampling appears in most texts on statistical sampling.

Cochran notes, "If intelligently used, stratification nearly always results in a smaller variance for the mean or total than is given by a comparable simple random sample" (12). Furthermore, in the present study, precision was increased by stratification in view of the following conditions:

1. The population was composed of hospitals varying widely in size.
2. The principal variable to be measured was closely related to the size of the hospitals.
3. A good measure of size, namely, number of admissions, was available for setting up the strata.

"Nonresponse" refers to the failure to measure some of the units in the sample. With continuous data, any sizable proportion of nonresponse usually makes it impossible to assign useful confidence limits to the sample results. Most nonresponse in this study were expected to fall into one of three categories.

1. Inability to answer due to change in hospital codes.
2. Unavailability of hospital administrator or record librarian.
3. Refusal by administrators of admission to hospital records due to confidentiality.

It was also recognized that a nonresponse might arise because of inadequate coding of hospital records. Although the majority of hospitals use the PAS, ICDA, or H-ICDA codes, occasionally a hospital uses a code designed by and for a specific individual maintaining the records. When that person leaves the job, the records cannot be retrieved. Such a situation arose on one occasion in the Colorado pre-test.

It had been anticipated that some hospital administrators would refuse access to patient's records on the basis of confidentiality or other considerations. Each administrator was notified in advance, by letter, of the week that a field epidemiologist would be in the area doing the study. A hospital which refused to reveal records was termed a nonrespondent; actually in terms of the patient records such a hospital could be considered a cluster of nonrespondents. In discussing nonresponse, it was convenient to divide the population of hospitals into two strata, the first consisting of all hospitals in which patient records were available, the second consisting of those hospitals for which patient records were not available. This division into two distinct strata was, of course, an oversimplification. In a more complete specification of the problem, one should attach to each hospital a probability representing the chance that its patient records would be available if it fell within the sample.

The survey plans did not provide information about the nonresponse stratum. This would not matter if it could be assumed that the characteristics of the nonresponse stratum are the same as those of the response stratum. To determine whether differences exist between hospitals in the two strata, a random subsample of the hospitals in the nonresponse stratum was drawn and a major effort was made to survey every hospital in the subsample. Two types of callback were conceived: a second contact with the hospital administrator either by a different field epidemiologist or by his or her supervisor; and contact with the hospital chief of staff instead of the hospital administrator, preferably by someone other than the field epidemiologist who made the original contact.

To check the thoroughness of the field epidemiologists in abstracting patient records, investigators arranged to resample 5 percent of the total poisoning cases surveyed. Further quality control was built into the program by thoroughly instructing epidemiologists who could, in turn, instruct medical librarians to pull appropriate patient records. Epidemiologists were cautioned not to oversample and risk losing cooperation of the hospital administrators.

The training consisted of three phases: a workshop training course in Fort Collins July 23-24, 1974; an initial field trial in late August; and a second training course in Iowa City September 5-6, 1974. The second training course provided an opportunity to identify and discuss some problems in the execution of the field trial.

To control the quality of these data, selected staff members at the Colorado Pesticide Center were trained to edit and code, the completed data sheet.

Using the notation presented above, the estimate of the total number of acute pesticide poisonings can be written in the form

$$\hat{Y} = \sum_{i=1}^{50} \sum_{j=1}^{n_i} \hat{Y}_{ij}$$

where $\hat{Y}_{ij}$ is the estimated total number of hospitalized acute pesticide poisonings in the $j^{\underline{th}}$ usage level in the $i^{\underline{th}}$ State and the $n_i$ equals 1 or 2, depending on the State; that is,

$$\hat{Y}_{ij} = \frac{y_{ij}}{x_{ij}} X_{ij}$$

where $y_{ij}$, $x_{ij}$, and $X_{ij}$ have been defined in the above example. If $n_{ij}$ and $N_{ij}$ denote the sample and population, respectively, number of hospitals in the $j^{th}$ usage level in the $i^{th}$ State, then the variance of the estimate $\hat{Y}$ is approximately

$$\mathrm{Var}(\hat{Y}) = \sum_{i=1}^{50} \sum_{j=1}^{n_i} \frac{N_{ij}(N_{ij} - n_{ij})}{n_{ij}} S^2_{d_{ij}}$$

where $S^2_{d_{ij}}$ is the approximate variance of $\hat{Y}_{ij}$:

$$S^2_{d_{ij}} = (S^2_{y_{ij}} + p^2_{kj} \; S^2_{x_{ij}} - 2p_{ij} \, \rho_{ij} \, S_{y_{ij}} \, S_{x_{ij}}).$$

In the above formula, $p$ denotes the true population ratio $\frac{Y}{X}$, $\rho$ denotes the correlation coefficient between $X$ and $Y$, and $S^2_y$ and $S^2_x$ denote the population variances of $Y$ and $X$, respectively.

With a constant cost per stratum, the variance of $\hat{Y}$ can be minimized by choosing sample sizes $n_{ij}$ proportional to $N_{ij} \, S_{d_{ij}}$. In planning a sample, the allocation with a ratio estimate such as that defined above is extremely perplexing since it is usually difficult to speculate about the values of $S_{d_{ij}}$. If $S_{d_{ij}}$ remains constant over all strata, then $n_{ij}$ can be chosen proportional to $N_{ij}$, resulting in a constant rate of sampling for all strata. However, because the investigators believed that $S_{d_{ij}}$ could reasonably be higher in the high use areas and because followup studies might be conducted eventually, sampling was heavier in the high pesticide usage areas.

In the ideal survey sampling plan, the sample size should be chosen not only to satisfy cost constraints, as in the present plan, but also to meet requirements for obtaining the desired precision of the estimate. For example, an estimate in error by no more than 100 cases might be desired. This problem can be solved easily when certain population values, i.e., $p, \rho$ , $S_x$, $S_y$ are known; when these population values are not known, as in the case at hand, no solution is possible. However, there are two-stage procedures, such as that of Stein (13 ), for determining the sample size required for a specified degree of precision on the basis of a preliminary sample. The pilot test indicated that initial sample sizes would meet requirements for precision of the estimates.

Estimates in Tables 49 and following were developed from the total numbers of observed cases by each selected parameter identified in the table heading within each State or region, rather than from individual strata within each State. Therefore, the sums of the regional or State estimates in these tables differ slightly from sums in preceding tables.

# NATIONAL ESTIMATES OF ACUTE HOSPITALIZED PESTICIDE POISONINGS, INCIDENCE, AND MORTALITY RATES, 1971-73.

## CHAPTER IV
## RESULTS

On the basis of the estimation procedure described in Chapter III, the estimated number of pesticide poisonings admitted to general care hospitals and the incidence rates per 100,000 hospital admissions were developed for the Nation, Environmental Protection Agency Regions, and each of the 50 States and the District of Columbia. Mortality numbers and rates were also developed for the United States and for EPA Regions.

Henceforth in this report estimated numbers shall refer to numbers of hospital admitted pesticide poisonings and deaths, and incidence rates shall refer to cases of pesticide poisonings admitted to hospitals per 100,000 hospital admissions.

### Poisonings and Rates by Nation, EPA Region, and State

The estimated number of hospital-admitted pesticide poisonings in the United States in 1971-73 was 8,248. Poisonings rose from 2,596 in 1971, and 2,821 in 1972, to 2,831 in 1973, an increase of 235 cases or 9 percent during the three-year period. Incidence rates ranged from 8.2 cases per 100,000 hospital admissions in 1971 to 8.5 in 1973.

In 1971 the estimated number of poisonings ranged from 39 in EPA Region I to 588 in Region IV. Incidence rates ranged from 1.6 in Region II, to 17.1 in Region IX.

In 1972 the estimated number of poisonings ranged from 41 in EPA Region I to 628 in Region IV. Incidence rates ranged from 2.4 in Regions I and II to 15.3 in Region IX.

In 1973 the estimated number of poisonings ranged from 77 in Region I to 547 in Region IX. Incidence rates ranged from 2.2 in Region II to 15.5 in Region IX.

Data from 1971 to 1973 in Regions I, V, VII, VIII, and X clearly indicate an increase in the numbers of pesticide poisonings admitted to general-care hospitals. Three regions (IV, VI, and IX) have consistently maintained incidence rates greater than the average rate of the ten regions. Six of the regions (I, II, V, VII, VIII, and X) had higher incidence rates in 1973 than in 1971.

Among the 50 States, California had the highest estimated number of pesticide poisonings in 1971, 1972, and 1973; respective figures were 488, 438, and 462. Delaware, the District of Columbia, and Idaho had the highest rates of pesticide poisoning admissions in 1971-73. Respective incidence rates per 100,000 hospital admissions were 57.5, 79.7, and 48.4.

## Poisonings and Rates by Cause of Exposure

Nationally, the estimated numbers of pesticide poisonings admitted to general-care hospitals as a result of occupational exposure increased from 811 in 1971 to 855 in 1973. Admissions of non-occupational pesticide poisonings increased from 1,295 in 1971 to 1,446 in 1973. Admissions of intentional pesticide poisonings increased from 475 in 1971 to 516 in 1973. However, incidence rates of pesticide poisonings per 100,000 hospital admissions in the occupationally exposed was 2.5 in 1971, and remained at that figure in 1973. Incidence rates of the nonoccupationally and intentionally exposed groups were not significantly different in 1973 from those of 1971.

In 1971 Region IV had an estimated 332 occupationally related pesticide poisonings and Region VI had an incidence rate of 6.6 cases per 100,000 hospital addmissions. These were the highest rates in the regions. The estimated number of occupationally related pesticide poisonings admitted to general-care hospitals by States in 1971 was highest in Texas, which had 208. Idaho had the highest incidence rate: 18.2 cases per 100,000 hospital admissions. California had 239 estimated nonoccupational pesticide poisonings, the highest among the States. Delaware had the highest incidence rate for this group: 38.3 cases per 100,000 hospital admissions.

In 1972, Region IV had an estimated 225 occupationally related pesticide poisonings and an incidence rate of 4.2 cases per 100,000 hospital admissions, the highest among the regions. Region V, with an estimated number of 367 nonoccupationally exposed pesticide poisonings, was highest among the regions, Region III had the highest incidence rate: 7.9 cases per 100,000 hosiptal admissions. Georgia had an estimated 98 occupationally related pesticide poisonings, the highest among the States. Delaware had the highest incidence rate: 56.5 cases per 100,000 hospital admissions. California, with an estimated 231 nonoccupationally related pesticides poisonings, was the highest among the States, and the District of Columbia had the highest incidence rate: 68.3 cases per 100,000 hospital admissions.

In 1973 Region IV had an estimated 296 occupationally related pesticide poisonings, the highest among the regions, and Region VI had the highest incidence rate: 5.8 cases per 100,000 hospital admissions. Region V, with an estimated number of 364 nonoccupationally exposed pesticide poisonings, was highest among the regions: Region IX had the highest incidence rate: 9.0 cases per 100,000 hospital admissions. Texas had an estimated 163 occupationally related pesticide poisonings, the highest among the States, and Idaho had the highest incidence rate: 31.2 cases per 100,000 hospital admissions. California had an estimated 278 nonoccupationally related pesticide poisonings, the highest among the States, and the District of Columbia had the highest incidence rate: 22.0 cases per 100,000 hospital admissions.

In 1971 skilled and unskilled laborers had an estimated 210 admitted pesticide poisonings, the highest rate of any occupationally-exposed group. Region VI had an estimated 132 admitted pesticide poisonings in this group, the highest of any region. Region VI had the highest incidence rate among skilled and unskilled laborers: 3.8 cases per 100,000 hospital admissions.

In 1972 farmers had an estimated 173 hospital-admitted pesticide poisonings, the highest rate of any occupationally-exposed group. Region IV had an estimated 69 admitted pesticide poisonings, the highest among the regions. Region IV also had the highest incidence rate among farmers: 1.3 cases per 100,000 hospital admissions.

In 1973 farmers had an estimated 227 hospital-admitted pesticide poisonings, once again the highest of any occupationally-exposed group. Region IV had an estimated 72 admitted pesticide poisonings in this group highest among the regions. Region VIII had the highest incidence rate among the hospital-admitted farmers, however, with 3.0 pesticide poisonings per 100,000 hospital admissions.

## Poisonings and Rates by Major Pesticide Class

Organophosphates were most often involved in occupationally related hospital-admitted pesticide poisonings in 1971-73.

In 1971 organophosphates were involved in an estimated 572 such poisonings; chlorinated hydrocarbons were estimated to be responsible for only 79 cases. Region IV had an estimated 242 organophosphate poisonings, highest among the regions. Region VI had the highest incidence rate: 5.3 cases per 100,000 hospital admissions.

In 1972 organophosphates were involved in an estimated 454 occupationally related hospital-admitted pesticide poisonings; chlorinated hydrocarbons were estimated to be responsible for only 102 such cases. Region IV, with an estimated 174 organophosphate poisonings, and an incidence rate of 3.1 cases per 100,000 admissions, was again high among all EPA regions.

In 1973 organophosphates contributed to an estimated 544 occupationally related hospital-admitted pesticide poisonings; chlorinated hydrocarbons were estimated to be responsible for only 140 such cases. Region IV had an estimated 174 organophosphate poisonings, highest of all EPA regions. Region VI had the highest incidence rate: 4.2 cases per 100,000 hospital admissions.

### Poisonings and Rates Among Children 0-4 Years

In 1971 an estimated 995 children 0-4 years of age were admitted to hospitals as a result of pesticide poisonings. In Region V an estimated 284 children were admitted to hospitals, more than in any other region. Region I had only an estimated 21 children admitted to hospitals, lowest among all regions for children under 5 years. Region IX had an incidence rate of 5.9 cases per 100,000 hospital admissions, highest among all regions. Highest rates among States were California, where an estimated 198 children were admitted to hospitals because of pesticide poisoning, and Delaware, which had an incidence rate of 36.5 cases per 100,000 hospital admissions.

In 1972 an estimated 1,231 children under 5 years of age were admitted to hospitals as a result of pesticide poisonings. In Region V , an estimated 309 children were admitted to hospitals, more than in any other region. Region VIII had an estimated 11 children admitted to hospitals, fewer than in any other region. Regions III and IX had an incidence rate of 5.4 cases per 100,000 admissions, the highest among all regions. California, where an estimated 172 children were admitted to hospitals, and the District of Columbia, which had an incidence rate of 66.1 cases per 100,000 hospital admissions were highest among the States.

In 1973 an estimated 1,001 children 0-4 years of age were admitted to hospitals as a result of pesticide poisonings. Once again Region V, with an estimated 286 children admitted, was highest among all regions. Region I, with an estimated six children admitted, was lowest. Region IX had an incidence rate of 7.3 cases per 100,000 hospital admissions, higher than any other region. California, where an estimated 238 children were admitted to hospitals, and the District of Columbia, which had an incidence rate of 16.5 cases per 100,000 admissions were high among States.

### Poisoning Deaths by Cause of Exposure and Age

Approximately 49 hospitalized individuals died in 1971 because of pesticide poisonings. Eight of these were occupationally related deaths in Region VI. Region IV, where 17 nonoccupationally related deaths occured, led all regions.

It is estimated that 92 persons died in hospitals as a result of pesticide poisonings in 1972. Region IV, with an estimated eight occupationally related deaths, and Region VI, with 16 nonoccupationally related deaths were high among the regions.

An estimated 54 hospital-admitted deaths occurred in 1973 as a result of pesticide poisonings. Approximately eight of these were occupationally-exposed workers in Region VI; another eight were non-occupationally exposed persons in Region V. These two were high among the regions.

In 1971-73 among occupationally-exposed workers, eight deaths were estimated in the 25-32 year age group, and another eight in the 55-64 year group. During the same three-year period 16 deaths were estimated in the nonoccupational hospital-admitted pesticide poisonings among children under 10 years.

## TABLE 1

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS IN THE UNITED STATES IN 1971, 1972, AND 1973.

| | ESTIMATED NUMBER | RATES |
|---|---|---|
| 1971 | 2596 | 8.2 |
| 1972 | 2821 | 8.8 |
| 1973 | 2831 | 8.5 |

## TABLE 2

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, EPA REGIONS IN 1971.

| EPA REGION | ESTIMATED NUMBER | RATES |
|---|---|---|
| I | 39 | 2.4 |
| II | 55 | 1.6 |
| III | 236 | 6.9 |
| IV | 588 | 10.9 |
| V | 383 | 5.6 |
| VI | 458 | 12.8 |
| VII | 129 | 6.5 |
| VIII | 60 | 5.9 |
| IX | 574 | 17.1 |
| X | 74 | 7.4 |
| TOTAL | 2596 | 8.2 |

## TABLE 3

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, EPA REGIONS IN 1972.

| EPA REGION | ESTIMATED NUMBER | RATES |
|---|---|---|
| I | 41 | 2.4 |
| II | 85 | 2.4 |
| III | 355 | 10.2 |
| IV | 628 | 11.4 |
| V | 444 | 6.4 |
| VI | 400 | 11.0 |
| VII | 153 | 7.5 |
| VIII | 102 | 10.0 |
| IX | 523 | 15.3 |
| X | 90 | 8.8 |
| TOTAL | 2821 | 8.8 |

TABLE 4

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, EPA REGIONS IN 1973.

| EPA REGION | ESTIMATED NUMBER | RATES |
|---|---|---|
| I | 77 | 4.4 |
| II | 80 | 2.2 |
| III | 220 | 6.1 |
| IV | 538 | 9.4 |
| V | 449 | 6.3 |
| VI | 458 | 12.2 |
| VII | 203 | 9.8 |
| VIII | 113 | 10.7 |
| IX | 547 | 15.5 |
| X | 146 | 13.5 |
| TOTAL | 2831 | 8.5 |

## TABLE 5

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, REGION I AND STATES IN 1971, 1972, AND 1973.

| | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION I | 39 | 2.4 | 41 | 2.4 | 77 | 4.4 |
| MAINE | 0 | 0 | 22 | 12.9 | 43 | 25.2 |
| NEW HAMPSHIRE | 0 | 0 | 0 | 0 | 0 | 0 |
| VERMONT | 0 | 0 | 0 | 0 | 0 | 0 |
| MASSACHUSETTS | 13 | 1.5 | 19 | 2.3 | 19 | 2.3 |
| RHODE ISLAND | 0 | 0 | 0 | 0 | 0 | 0 |
| CONNECTICUT | 26 | 6.2 | 0 | 0 | 15 | 3.7 |

## TABLE 6

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, REGION II AND STATES, IN 1971, 1972, AND 1973.

| | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION II | 55 | 1.6 | 85 | 2.4 | 80 | 2.2 |
| NEW YORK | 34 | 1.2 | 34 | 1.3 | 45 | 1.7 |
| NEW JERSEY | 21 | 2.2 | 51 | 5.3 | 35 | 15.3 |

## TABLE 7

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, REGION III AND STATES, IN 1971, 1972, AND 1973.

| | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION III | 236 | 6.9 | 355 | 10.2 | 220 | 6.1 |
| PENNSYLVANIA | 105 | 6.0 | 85 | 4.8 | 90 | 5.0 |
| DELAWARE | 41 | 57.5 | 41 | 56.5 | 14 | 18.2 |
| MARYLAND | 26 | 5.7 | 52 | 11.2 | 32 | 6.8 |
| DISTRICT OF COLUMBIA | 42 | 23.2 | 147 | 79.7 | 52 | 27.5 |
| VIRGINIA | 16 | 2.2 | 16 | 2.2 | 32 | 4.5 |
| WEST VIRGINIA | 6 | 1.5 | 14 | 3.9 | 0 | 0 |

## TABLE 8

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, REGION IV AND STATES, IN 1971, 1972, AND 1973.

| | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION IV | 588 | 10.9 | 628 | 11.4 | 538 | 9.4 |
| NORTH CAROLINA | 108 | 14.3 | 100 | 13.1 | 94 | 11.8 |
| SOUTH CAROLINA | 17 | 4.0 | 25 | 5.9 | 42 | 9.6 |
| GEORGIA | 127 | 16.9 | 127 | 16.6 | 120 | 15.2 |
| FLORIDA | 195 | 15.9 | 73 | 5.9 | 114 | 8.8 |
| KENTUCKY | 39 | 7.0 | 98 | 17.3 | 27 | 4.5 |
| TENNESSEE | 42 | 5.9 | 91 | 12.5 | 77 | 10.3 |
| ALABAMA | 39 | 6.6 | 62 | 10.4 | 54 | 8.8 |
| MISSISSIPPI | 21 | 5.2 | 52 | 12.8 | 10 | 2.5 |

## TABLE 9

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, REGION V AND STATES, IN 1971, 1972, AND 1973.

| | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION V | 383 | 5.6 | 444 | 6.4 | 449 | 6.3 |
| OHIO | 54 | 3.2 | 76 | 4.5 | 90 | 5.4 |
| INDIANA | 11 | 1.3 | 21 | 2.6 | 42 | 5.1 |
| ILLINOIS | 152 | 8.1 | 191 | 10.3 | 201 | 10.7 |
| MICHIGAN | 91 | 6.6 | 78 | 5.6 | 41 | 3.0 |
| WISCONSIN | 35 | 4.7 | 44 | 5.9 | 41 | 5.5 |
| MINNESOTA | 40 | 5.9 | 34 | 5.1 | 34 | 5.0 |

TABLE 10

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, REGION VI AND STATES, IN 1971, 1972, AND 1973.

| | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION VI | 458 | 12.8 | 400 | 11.0 | 458 | 12.2 |
| ARKANSAS | 7 | 1.9 | 28 | 7.6 | 0 | 0 |
| LOUISIANA | 38 | 6.1 | 48 | 7.5 | 57 | 8.7 |
| OKLAHOMA | 38 | 8.0 | 28 | 6.0 | 37 | 8.0 |
| TEXAS | 355 | 17.0 | 256 | 12.4 | 353 | 17.1 |
| NEW MEXICO | 20 | 11.7 | 40 | 22.9 | 10 | 5.5 |

## TABLE 11

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, REGION VII AND STATES, IN 1971, 1972, AND 1973.

| | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION VII | 129 | 6.5 | 153 | 7.5 | 203 | 9.8 |
| IOWA | 30 | 5.7 | 58 | 11.0 | 55 | 10.4 |
| MISSOURI | 64 | 7.5 | 32 | 3.8 | 51 | 6.2 |
| NEBRASKA | 6 | 2.1 | 12 | 4.2 | 34 | 11.9 |
| KANSAS | 29 | 6.9 | 51 | 12.0 | 63 | 14.8 |

### TABLE 12

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, REGION VIII AND STATES, IN 1971, 1972, AND 1973.

| | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION VIII | 60 | 5.9 | 102 | 10.0 | 113 | 10.7 |
| NORTH DAKOTA | 7 | 5.7 | 14 | 11.2 | 14 | 10.8 |
| SOUTH DAKOTA | 0 | 0 | 5 | 3.9 | 8 | 6.2 |
| MONTANA | 11 | 7.7 | 0 | 0 | 0 | 0 |
| WYOMING | 0 | 0 | 0 | 0 | 0 | 0 |
| COLORADO | 33 | 7.5 | 69 | 16.9 | 79 | 18.2 |
| UTAH | 9 | 5.6 | 14 | 8.4 | 12 | 7.3 |

## TABLE 13

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, REGION IX AND STATES, IN 1971, 1972, AND 1973.

| | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION IX | 574 | 17.1 | 523 | 15.3 | 547 | 15.5 |
| CALIFORNIA | 488 | 16.1 | 438 | 14.4 | 462 | 15.2 |
| ARIZONA | 61 | 18.1 | 79 | 23.5 | 73 | 21.7 |
| NEVADA | 0 | 0 | 0 | 0 | 0 | 0 |
| HAWAII | 25 | 35.6 | 6 | 8.7 | 12 | 16.9 |

## TABLE 14

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, REGION X AND STATES, IN 1971, 1972, AND 1973.

| | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION X | 74 | 7.4 | 90 | 8.8 | 146 | 13.5 |
| IDAHO | 21 | 17.3 | 17 | 13.8 | 58 | 48.4 |
| WASHINGTON | 30 | 5.5 | 22 | 4.2 | 53 | 9.9 |
| OREGON | 23 | 6.9 | 51 | 15.1 | 35 | 9.2 |
| ALASKA | 0 | 0 | 0 | 0 | 0 | 0 |

## TABLE 15

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE IN THE UNITED STATES IN 1971, 1972, AND 1973.

| | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| OCCUPATIONAL | 811 | 2.5 | 629 | 1.9 | 855 | 2.5 |
| NON-OCCUPATIONAL | 1295 | 4.1 | 1720 | 5.4 | 1446 | 4.3 |
| INTENTIONAL | 475 | 1.6 | 425 | 1.3 | 516 | 1.6 |
| UNCLASSIFIED | 15 | | 47 | | 14 | |
| TOTAL | 2596 | 8.2 | 2821 | 8.8 | 2831 | 8.5 |

## TABLE 16

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGIONS IN 1971.

| | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| EPA REGION | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| I | 6 | 0.5 | 28 | 1.4 | 4 | 0.5 |
| II | 0 | 0.0 | 32 | 1.0 | 21 | 0.6 |
| III | 14 | 0.3 | 197 | 5.7 | 12 | 0.3 |
| IV | 332 | 6.1 | 212 | 3.9 | 43 | 0.8 |
| V | 27 | 0.4 | 300 | 4.4 | 55 | 0.8 |
| VI | 247 | 6.6 | 156 | 4.5 | 55 | 1.7 |
| VII | 43 | 1.9 | 66 | 3.7 | 21 | 0.9 |
| VIII | 28 | 3.0 | 28 | 2.0 | 5 | 1.0 |
| IX | 85 | 2.1 | 251 | 7.5 | 238 | 7.5 |
| X | 29 | 2.7 | 25 | 2.7 | 21 | 2.0 |
| U.S. TOTAL | 811 | 2.5 | 1295 | 4.1 | 475 | 1.6 |

## TABLE 17

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION I AND STATES IN 1971.

| | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| REGION AND STATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION I | 6 | 0.5 | 28 | 1.4 | 4 | 0.5 |
| MAINE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NEW HAMPSHIRE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| VERMONT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MASSACHUSETTS | 6 | 0.7 | 7 | 0.9 | 0 | 0.0 |
| RHODE ISLAND | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| CONNECTICUT | 0 | 0.0 | 21 | 5.4 | 4 | 1.1 |

### TABLE 18

### ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION II AND STATES IN 1971.

| REGION AND STATE | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION II | 0 | 0.0 | 32 | 1.0 | 21 | 0.6 |
| NEW YORK | 0 | 0.0 | 22 | 0.9 | 11 | 0.5 |
| NEW JERSEY | 0 | 0.0 | 10 | 1.1 | 10 | 1.1 |

### TABLE 19

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION III AND STATES IN 1971.

| | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| REGION AND STATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION III | 14 | 0.3 | 197 | 5.7 | 12 | 0.3 |
| PENNSYLVANIA | 0 | 0.0 | 93 | 5.5 | 12 | 0.7 |
| DELAWARE | 14 | 19.2 | 27 | 38.3 | 0 | 0.0 |
| MARYLAND | 0 | 0.0 | 13 | 2.9 | 0 | 0.0 |
| DISTRICT OF COLUMBIA | 0 | 0.0 | 42 | 23.2 | 0 | 0.0 |
| VIRGINIA | 0 | 0.0 | 16 | 2.3 | 0 | 0.0 |
| WEST VIRGINIA | 0 | 0.0 | 6 | 1.6 | 0 | 0.0 |

## TABLE 20

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION IV AND STATES IN 1971.

| REGION AND STATE | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION IV | 332 | 6.1 | 212 | 3.9 | 43 | 0.8 |
| NORTH CAROLINA | 65 | 8.6 | 29 | 3.8 | 14 | 1.9 |
| SOUTH CAROLINA | 17 | 4.0 | 0 | 0.0 | 0 | 0.0 |
| GEORGIA | 84 | 11.3 | 35 | 4.7 | 7 | 0.9 |
| FLORIDA | 130 | 10.6 | 57 | 4.6 | 8 | 0.7 |
| KENTUCKY | 7 | 1.2 | 26 | 4.7 | 7 | 1.2 |
| TENNESSEE | 14 | 2.0 | 21 | 2.9 | 7 | 1.0 |
| ALABAMA | 15 | 2.6 | 23 | 4.0 | 0 | 0.0 |
| MISSISSIPPI | 0 | 0.0 | 21 | 5.2 | 0 | 0.0 |

## TABLE 21

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION V AND STATES IN 1971.

| REGION & STATE | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION V | 27 | 0.4 | 300 | 4.4 | 55 | 0.8 |
| OHIO | 0 | 0.0 | 45 | 2.8 | 9 | 0.6 |
| INDIANA | 0 | 0.0 | 11 | 1.4 | 0 | 0.0 |
| ILLINOIS | 21 | 1.2 | 101 | 5.7 | 29 | 1.6 |
| MICHIGAN | 6 | 0.5 | 74 | 5.6 | 11 | 0.8 |
| WISCONSIN | 0 | 0.0 | 29 | 4.0 | 6 | 0.9 |
| MINNESOTA | 0 | 0.0 | 40 | 6.1 | 0 | 0.0 |

## TABLE 22

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION VI AND STATES IN 1971.

| REGION & STATE | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION VI | 247 | 6.6 | 156 | 4.5 | 55 | 1.7 |
| ARKANSAS | 0 | 0.0 | 7 | 2.0 | 0 | 0.0 |
| LOUISIANA | 10 | 1.5 | 29 | 4.6 | 0 | 0.0 |
| OKLAHOMA | 19 | 4.2 | 9 | 2.1 | 9 | 2.1 |
| TEXAS | 208 | 10.5 | 101 | 5.1 | 46 | 2.3 |
| NEW MEXICO | 10 | 5.8 | 10 | 5.8 | 0 | 0.0 |

## TABLE 23

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION VII AND STATES IN 1971.

| REGION & STATE | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION VII | 43 | 1.9 | 66 | 3.7 | 21 | 0.9 |
| IOWA | 0 | 0.0 | 20 | 4.0 | 10 | 2.0 |
| MISSOURI | 43 | 5.3 | 11 | 1.3 | 11 | 1.3 |
| NEBRASKA | 0 | 0.0 | 6 | 2.2 | 0 | 0.0 |
| KANSAS | 0 | 0.0 | 29 | 7.3 | 0 | 0.0 |

TABLE 24

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION VIII AND STATES IN 1971.

| REGION & STATE | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION VIII | 28 | 3.0 | 28 | 2.0 | 5 | 1.0 |
| NORTH DAKOTA | 7 | 5.7 | 0 | 0.0 | 0 | 0.0 |
| SOUTH DAKOTA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MONTANA | 11 | 8.1 | 0 | 0.0 | 0 | 0.0 |
| WYOMING | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| COLORADO | 10 | 2.4 | 23 | 5.6 | 0 | 0.0 |
| UTAH | 0 | 0.0 | 5 | 3.0 | 5 | 3.0 |

## TABLE 25

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION IX AND STATES IN 1971.

| | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| REGION & STATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION IX | 85 | 2.1 | 251 | 7.5 | 238 | 7.5 |
| CALIFORNIA | 30 | 1.1 | 239 | 8.3 | 219 | 6.4 |
| ARIZONA | 55 | 17.1 | 6 | 1.9 | 0 | 0.0 |
| NEVADA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| HAWAII | 0 | 0.0 | 6 | 8.9 | 19 | 26.7 |

## TABLE 26

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION X AND STATES IN 1971.

| | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| REGION & STATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION X | 29 | 2.7 | 25 | 2.7 | 21 | 2.0 |
| IDAHO | 21 | 18.2 | 0 | 0.0 | 0 | 0.0 |
| WASHINGTON | 8 | 1.5 | 13 | 2.6 | 9 | 1.8 |
| OREGON | 0 | 0.0 | 12 | 3.7 | 12 | 3.7 |
| ALASKA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

### TABLE 27

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGIONS IN 1972.

| EPA REGION | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| I | 0 | 0.0 | 35 | 1.9 | 6 | 0.5 |
| II | 0 | 0.0 | 68 | 2.0 | 16 | 0.5 |
| III | 41 | 0.8 | 267 | 7.9 | 34 | 1.0 |
| IV | 225 | 4.2 | 303 | 5.4 | 70 | 1.3 |
| V | 26 | 0.4 | 367 | 5.3 | 53 | 0.7 |
| VI | 140 | 3.8 | 235 | 6.5 | 26 | 0.7 |
| VII | 39 | 2.1 | 97 | 4.6 | 17 | 0.8 |
| VIII | 35 | 3.3 | 44 | 5.5 | 23 | 7.7 |
| IX | 97 | 2.8 | 249 | 7.0 | 171 | 5.3 |
| X | 26 | 2.2 | 55 | 5.9 | 9 | 0.7 |
| U.S. TOTAL | 629 | 1.9 | 1720 | 5.4 | 425 | 1.3 |

## TABLE 28

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,00C HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION I AND STATES IN 1972.

|  | OCCUPATIONAL |  | NON-OCCUPATIONAL |  | INTENTIONAL |  |
|---|---|---|---|---|---|---|
| REGION & STATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION I | 0 | 0.0 | 35 | 1.9 | 6 | 0.5 |
| MAINE | 0 | 0.0 | 22 | 12.0 | 0 | 0.0 |
| NEW HAMPSHIRE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| VERMONT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MASSACHUSETTS | 0 | 0.0 | 13 | 1.6 | 6 | 0.7 |
| RHODE ISLAND | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| CONNECTICUT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 29

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION II AND STATES IN 1972.

| REGION & STATE | OCCUPATIONAL |  | NON-OCCUPATIONAL |  | INTENTIONAL |  |
|---|---|---|---|---|---|---|
|  | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION II | 0 | 0.0 | 68 | 2.0 | 16 | 0.5 |
| NEW YORK | 0 | 0.0 | 22 | 0.8 | 11 | 0.5 |
| NEW JERSEY | 0 | 0.0 | 46 | 5.0 | 5 | 0.5 |

TABLE 30

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION III AND STATES IN 1972.

| | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| REGION & STATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION III | 41 | 0.8 | 267 | 7.9 | 34 | 1.0 |
| PENNSYLVANIA | 0 | 0.0 | 85 | 5.0 | 0 | 0.0 |
| DELAWARE | 41 | 56.5 | 0 | 0.0 | 0 | 0.0 |
| MARYLAND | 0 | 0.0 | 26 | 5.6 | 13 | 2.8 |
| DISTRICT OF COLUMBIA | 0 | 0.0 | 126 | 68.3 | 21 | 11.4 |
| VIRGINIA | 0 | 0.0 | 16 | 2.3 | 0 | 0.0 |
| WEST VIRGINIA | 0 | 0.0 | 14 | 4.0 | 0 | 0.0 |

## TABLE 31

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION IV AND STATES IN 1972.

| REGION & STATE | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION IV | 225 | 4.2 | 303 | 5.4 | 70 | 1.3 |
| NORTH CAROLINA | 14 | 1.9 | 57 | 7.5 | 0 | 0.0 |
| SOUTH CAROLINA | 8 | 2.0 | 17 | 4.0 | 0 | 0.0 |
| GEORGIA | 98 | 12.9 | 21 | 2.8 | 7 | 0.9 |
| FLORIDA | 57 | 4.6 | 16 | 1.3 | 0 | 0.0 |
| KENTUCKY | 26 | 4.6 | 52 | 9.2 | 20 | 3.5 |
| TENNESSEE | 14 | 1.9 | 49 | 6.7 | 28 | 3.9 |
| ALABAMA | 8 | 1.3 | 39 | 6.5 | 15 | 2.6 |
| MISSISSIPPI | 0 | 0.0 | 52 | 12.8 | 0 | 0.0 |

## TABLE 32

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION V AND STATES IN 1972.

| | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| REGION & STATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION V | 26 | 0.4 | 367 | 5.3 | 53 | 0.7 |
| OHIO | 0 | 0.0 | 58 | 3.5 | 18 | 1.1 |
| INDIANA | 0 | 0.0 | 11 | 1.3 | 11 | 1.3 |
| ILLINOIS | 21 | 1.1 | 164 | 9.1 | 7 | 0.4 |
| MICHIGAN | 0 | 0.0 | 67 | 5.0 | 11 | 0.8 |
| WISCONSIN | 0 | 0.0 | 38 | 5.3 | 6 | 0.9 |
| MINNESOTA | 5 | 0.9 | 29 | 4.4 | 0 | 0.0 |

## TABLE 33

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION VI AND STATES IN 1972.

| REGION & STATE | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION VI | 140 | 3.8 | 235 | 6.5 | 26 | 0.7 |
| ARKANSAS | 0 | 0.0 | 28 | 7.9 | 0 | 0.0 |
| LOUISIANA | 19 | 3.0 | 29 | 4.5 | 0 | 0.0 |
| OKLAHOMA | 9 | 2.1 | 19 | 4.1 | 0 | 0.0 |
| TEXAS | 92 | 4.6 | 149 | 7.4 | 16 | 0.8 |
| NEW MEXICO | 20 | 11.4 | 10 | 5.7 | 10 | 5.7 |

## TABLE 34

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION VII AND STATES IN 1972.

| | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| REGION & STATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION VII | 39 | 2.1 | 97 | 4.6 | 17 | 0.8 |
| IOWA | 18 | 3.6 | 30 | 5.9 | 10 | 2.0 |
| MISSOURI | 0 | 0.0 | 32 | 3.9 | 0 | 0.0 |
| NEBRASKA | 6 | 2.1 | 6 | 2.1 | 0 | 0.0 |
| KANSAS | 15 | 3.5 | 29 | 7.1 | 7 | 1.8 |

## TABLE 35

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION VIII AND STATES IN 1972.

| REGION & STATE | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION VIII | 35 | 3.3 | 44 | 5.5 | 23 | 1.1 |
| NORTH DAKOTA | 7 | 5.6 | 7 | 5.6 | 0 | 0.0 |
| SOUTH DAKOTA | 0 | 0.0 | 5 | 4.0 | 0 | 0.0 |
| MONTANA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| WYOMING | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| COLORADO | 23 | 5.5 | 23 | 5.4 | 23 | 5.5 |
| UTAH | 5 | 2.9 | 9 | 5.8 | 0 | 0.0 |

TABLE 36

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION IX AND STATES IN 1972.

| REGION & STATE | OCCUPATIONAL |  | NON-OCCUPATIONAL |  | INTENTIONAL |  |
|---|---|---|---|---|---|---|
|  | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION IX | 97 | 2.8 | 249 | 7.0 | 171 | 5.3 |
| CALIFORNIA | 48 | 1.7 | 231 | 7.9 | 159 | 5.7 |
| ARIZONA | 49 | 14.9 | 18 | 5.6 | 6 | 1.9 |
| NEVADA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| HAWAII | 0 | 0.0 | 0 | 0.0 | 6 | 8.7 |

## TABLE 37

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION X AND STATES IN 1972.

| | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| REGION & STATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION X | 26 | 2.2 | 55 | 5.9 | 9 | 0.7 |
| IDAHO | 17 | 14.3 | 0 | 0.0 | 0 | 0.0 |
| WASHINGTON | 0 | 0.0 | 22 | 4.2 | 0 | 0.0 |
| OREGON | 9 | 2.8 | 33 | 10.0 | 9 | 2.8 |
| ALASKA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 38

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGIONS IN 1973.

| | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| EPA REGION | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| I | 43 | 1.9 | 28 | 1.9 | 6 | 0.5 |
| II | 20 | 0.7 | 60 | 1.5 | 0 | 0.0 |
| III | 16 | 0.5 | 151 | 4.0 | 53 | 1.6 |
| IV | 296 | 5.2 | 144 | 2.5 | 98 | 1.7 |
| V | 45 | 0.6 | 364 | 5.0 | 40 | 0.6 |
| VI | 221 | 5.8 | 127 | 3.6 | 102 | 2.6 |
| VII | 26 | 1.5 | 133 | 6.4 | 44 | 1.9 |
| VIII | 31 | 4.7 | 59 | 4.7 | 23 | 1.2 |
| IX | 107 | 2.3 | 302 | 9.0 | 138 | 4.2 |
| X | 50 | 4.1 | 78 | 7.4 | 12 | 1.4 |
| U.S. TOTAL | 855 | 2.5 | 1446 | 4.3 | 516 | 1.6 |

## TABLE 39

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION I AND STATES IN 1973.

| REGION & STATE | OCCUPATIONAL |  | NON-OCCUPATIONAL |  | INTENTIONAL |  |
|---|---|---|---|---|---|---|
|  | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION I | 43 | 1.9 | 28 | 1.9 | 6 | 0.5 |
| MAINE | 32 | 18.7 | 11 | 6.5 | 0 | 0.0 |
| NEW HAMPSHIRE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| VERMONT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MASSACHUSETTS | 0 | 0.0 | 13 | 1.6 | 6 | 0.7 |
| RHODE ISLAND | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| CONNECTICUT | 11 | 2.6 | 4 | 1.1 | 0 | 0.0 |

TABLE 40

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION II AND STATES IN 1973.

| REGION & STATE | OCCUPATIONAL |  | NON-OCCUPATIONAL |  | INTENTIONAL |  |
|---|---|---|---|---|---|---|
|  | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION II | 20 | .7 | 60 | 1.5 | 0 | 0.0 |
| NEW YORK | 0 | 0.0 | 45 | 1.7 | 0 | 0.0 |
| NEW JERSEY | 20 | 2.1 | 15 | 1.6 | 0 | 0.0 |

## TABLE 41

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION III AND STATES IN 1973.

| | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| REGION & STATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION III | 16 | 0.5 | 151 | 4.0 | 53 | 1.6 |
| PENNSYLVANIA | 0 | 0.0 | 76 | 4.2 | 14 | 0.8 |
| DELAWARE | 0 | 0.0 | 14 | 18.2 | 0 | 0.0 |
| MARYLAND | 0 | 0.0 | 19 | 4.1 | 13 | 2.7 |
| DISTRICT OF COLUMBIA | 0 | 0.0 | 42 | 22.0 | 10 | 5.0 |
| VIRGINIA | 16 | 2.3 | 0 | 0.0 | 16 | 2.3 |
| WEST VIRGINIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 42

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION IV AND STATES IN 1973.

| REGION & STATE | OCCUPATIONAL |  | NON-OCCUPATIONAL |  | INTENTIONAL |  |
|---|---|---|---|---|---|---|
|  | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION IV | 296 | 5.2 | 144 | 2.5 | 98 | 1.7 |
| NORTH CAROLINA | 72 | 9.1 | 22 | 2.7 | 0 | 0.0 |
| SOUTH CAROLINA | 17 | 3.8 | 17 | 3.8 | 8 | 1.9 |
| GEORGIA | 113 | 14.3 | 0 | 0.0 | 7 | 0.9 |
| FLORIDA | 65 | 5.0 | 33 | 2.5 | 16 | 1.3 |
| KENTUCKY | 7 | 1.1 | 13 | 2.2 | 7 | 1.1 |
| TENNESSEE | 7 | 0.9 | 28 | 3.7 | 42 | 5.6 |
| ALABAMA | 15 | 2.5 | 31 | 5.0 | 8 | 1.3 |
| MISSISSIPPI | 0 | 0.0 | 0 | 0.0 | 10 | 2.6 |

## TABLE 43

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION V AND STATES IN 1973.

| | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| REGION & STATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION V | 45 | 0.6 | 364 | 5.0 | 40 | 0.6 |
| OHIO | 0 | 0.0 | 74 | 4.4 | 16 | 1.0 |
| INDIANA | 11 | 1.3 | 31 | 3.8 | 0 | 0.0 |
| ILLINOIS | 28 | 1.5 | 165 | 8.9 | 8 | 0.4 |
| MICHIGAN | 6 | 0.5 | 35 | 2.5 | 0 | 0.0 |
| WISCONSIN | 0 | 0.0 | 41 | 5.5 | 0 | 0.0 |
| MINNESOTA | 0 | 0.0 | 18 | 2.6 | 16 | 2.4 |

### TABLE 44

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION VI AND STATES IN 1973.

| REGION & STATE | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION VI | 221 | 5.8 | 127 | 3.6 | 102 | 2.6 |
| ARKANSAS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| LOUISIANA | 29 | 4.3 | 0 | 0.0 | 29 | 4.3 |
| OKLAHOMA | 19 | 3.4 | 9 | 2.0 | 9 | 2.0 |
| TEXAS | 163 | 7.8 | 118 | 5.7 | 64 | 3.1 |
| NEW MEXICO | 10 | 5.5 | 0 | 0.0 | 0 | 0.0 |

TABLE 45

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION VII AND STATES IN 1973.

| REGION & STATE | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION VII | 26 | 1.5 | 133 | 6.4 | 44 | 1.9 |
| IOWA | 0 | 0.0 | 45 | 8.5 | 10 | 1.9 |
| MISSOURI | 13 | 1.6 | 17 | 2.1 | 21 | 2.5 |
| NEBRASKA | 6 | 2.1 | 22 | 7.7 | 6 | 2.1 |
| KANSAS | 7 | 1.7 | 49 | 11.4 | 7 | 1.7 |

## TABLE 46

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION VIII AND STATES IN 1973.

| REGION & STATE | OCCUPATIONAL |  | NON-OCCUPATIONAL |  | INTENTIONAL |  |
|---|---|---|---|---|---|---|
|  | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION VIII | 31 | 4.7 | 59 | 4.7 | 23 | 1.2 |
| NORTH DAKOTA | 14 | 10.8 | 0 | 0.0 | 0 | 0.0 |
| SOUTH DAKOTA | 5 | 3.8 | 3 | 2.4 | 0 | 0.0 |
| MONTANA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| WYOMING | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| COLORADO | 0 | 0.0 | 56 | 12.9 | 23 | 5.3 |
| UTAH | 12 | 7.2 | 0 | 0.0 | 0 | 0.0 |

## TABLE 47

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION IX AND STATES IN 1973.

| REGION & STATE | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION IX | 107 | 2.3 | 302 | 9.0 | 138 | 4.2 |
| CALIFORNIA | 46 | 1.5 | 278 | 9.2 | 138 | 4.6 |
| ARIZONA | 55 | 18.5 | 18 | 7.6 | 0 | 0.0 |
| NEVADA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| HAWAII | 6 | 8.5 | 6 | 8.5 | 0 | 0.0 |

## TABLE 48

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY CAUSE OF EXPOSURE, EPA REGION X AND STATES IN 1973.

| REGION & STATE | OCCUPATIONAL |  | NON-OCCUPATIONAL |  | INTENTIONAL |  |
|---|---|---|---|---|---|---|
|  | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION X | 50 | 4.1 | 78 | 7.4 | 12 | 1.4 |
| IDAHO | 37 | 31.2 | 21 | 17.3 | 0 | 0.0 |
| WASHINGTON | 4 | 0.7 | 40 | 7.4 | 9 | 1.7 |
| OREGON | 9 | 2.7 | 17 | 5.0 | 3 | 0.7 |
| ALASKA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 49

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| REGIONS | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| I | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.4 |
| II | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| III | 0 | 0.0 | 0 | 0.0 | 14 | 0.2 | 0 | 0.0 |
| IV | 51 | 0.9 | 55 | 0.9 | 88 | 1.6 | 48 | 0.8 |
| V | 15 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| VI | 8 | 0.2 | 23 | 0.7 | 18 | 0.5 | 29 | 0.7 |
| VII | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| VIII | 0 | 0.0 | 7 | 0.8 | 8 | 0.8 | 0 | 0.0 |
| IX | 14 | 0.4 | 56 | 1.5 | 0 | 0.0 | 0 | 0.0 |
| X | 8 | 0.7 | 18 | 1.4 | 0 | 0.0 | 8 | 0.7 |
| U.S. TOTAL | 96 | 0.3 | 159 | 0.5 | 128 | 0.4 | 91 | 0.3 |

## TABLE 49 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| REGIONS | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| I | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.4 |
| II | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| III | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 14 | 0.2 |
| IV | 55 | 0.9 | 14 | 0.3 | 21 | 0.4 | 332 | 5.8 |
| V | 7 | 0.1 | 0 | 0.0 | 10 | 0.1 | 32 | 0.4 |
| VI | 132 | 3.8 | 0 | 0.0 | 16 | 0.5 | 226 | 6.4 |
| VII | 16 | 0.4 | 0 | 0.0 | 16 | 0.4 | 32 | 0.8 |
| VIII | 0 | 0.0 | 0 | 0.0 | 17 | 0.8 | 32 | 2.4 |
| IX | 0 | 0.0 | 0 | 0.0 | 7 | 0.2 | 77 | 2.1 |
| X | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 34 | 2.8 |
| U.S. TOTAL | 210 | 0.6 | 14 | 0.0 | 87 | 0.2 | 785 | 2.3 |

TABLE 50

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION I | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.4 |
| MAINE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NEW HAMPSHIRE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| VERMONT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MASSACHUSETTS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.7 |
| RHODE ISLAND | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| CONNECTICUT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

### TABLE 50 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION I | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.4 |
| MAINE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NEW HAMPSHIRE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| VERMONT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MASSACHUSETTS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.7 |
| RHODE ISLAND | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| CONNECTICUT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 51

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION II | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NEW YORK | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NEW JERSEY | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 51 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION II | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NEW YORK | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NEW JERSEY | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

TABLE 52

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION III | 0 | 0.0 | 0 | 0.0 | 14 | 0.2 | 0 | 0.0 |
| PENNSYLVANIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| DELAWARE | 0 | 0.0 | 0 | 0.0 | 14 | 18.2 | 0 | 0.0 |
| MARYLAND | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| DISTRICT OF COLUMBIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| VIRGINIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| WEST VIRGINIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

TABLE 52 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION III | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 14 | 0.2 |
| PENNSYLVANIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| DELAWARE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 14 | 18.2 |
| MARYLAND | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| DISTRICT OF COLUMBIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| VIRGINIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| WEST VIRGINIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 53

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION IV | 51 | 0.9 | 55 | 0.9 | 88 | 1.6 | 48 | 0.8 |
| NORTH CAROLINA | 0 | 0.0 | 7 | 0.9 | 36 | 4.5 | 7 | 0.9 |
| SOUTH CAROLINA | 0 | 0.0 | 0 | 0.0 | 8 | 1.9 | 0 | 0.0 |
| GEORGIA | 28 | 3.6 | 7 | 0.9 | 28 | 3.6 | 0 | 0.0 |
| FLORIDA | 16 | 1.3 | 33 | 2.5 | 8 | 0.6 | 41 | 3.2 |
| KENTUCKY | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| TENNESSEE | 7 | 0.9 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| ALABAMA | 0 | 0.0 | 8 | 1.3 | 8 | 1.3 | 0 | 0.0 |
| MISSISSIPPI | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 53 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION IV | 55 | 0.9 | 14 | 0.3 | 21 | 0.4 | 332 | 5.8 |
| NORTH CAROLINA | 0 | 0.0 | 0 | 0.0 | 14 | 1.8 | 64 | 8.2 |
| SOUTH CAROLINA | 8 | 1.9 | 0 | 0.0 | 0 | 0.0 | 16 | 3.8 |
| GEORGIA | 7 | 0.9 | 14 | 1.8 | 0 | 0.0 | 84 | 10.7 |
| FLORIDA | 33 | 2.5 | 0 | 0.0 | 0 | 0.0 | 131 | 10.1 |
| KENTUCKY | 7 | 1.1 | 0 | 0.0 | 0 | 0.0 | 7 | 1.1 |
| TENNESSEE | 0 | 0.0 | 0 | 0.0 | 7 | 0.9 | 14 | 1.9 |
| ALABAMA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 16 | 2.5 |
| MISSISSIPPI | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 54

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION V | 15 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| OHIO | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| INDIANA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| ILLINOIS | 15 | 0.7 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MICHIGAN | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| WISCONSIN | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MINNESOTA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 54 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION V | 7 | 0.1 | 0 | 0.0 | 10 | 0.1 | 32 | 0.4 |
| OHIO | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| INDIANA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| ILLINOIS | 7 | 0.3 | 0 | 0.0 | 0 | 0.0 | 22 | 1.1 |
| MICHIGAN | 0 | 0.0 | 0 | 0.0 | 10 | 0.7 | 10 | 0.7 |
| WISCONSIN | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MINNESOTA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 55

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION VI | 8 | 0.2 | 23 | 0.7 | 18 | 0.5 | 29 | 0.7 |
| ARKANSAS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| LOUISIANA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 10 | 1.4 |
| OKLAHOMA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 19 | 4.0 |
| TEXAS | 8 | 0.3 | 23 | 1.1 | 8 | 0.3 | 0 | 0.0 |
| NEW MEXICO | 0 | 0.0 | 0 | 0.0 | 10 | 5.5 | 0 | 0.0 |

TABLE 55 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION VI | 132 | 3.8 | 0 | 0.0 | 16 | 0.5 | 226 | 6.4 |
| ARKANSAS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| LOUISIANA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 10 | 1.4 |
| OKLAHOMA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 19 | 4.0 |
| TEXAS | 132 | 6.3 | 0 | 0.0 | 16 | 0.7 | 187 | 8.9 |
| NEW MEXICO | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 10 | 5.5 |

## TABLE 56

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION VII | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| IOWA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MISSOURI | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NEBRASKA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| KANSAS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

TABLE 56 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION VII | 16 | 0.4 | 0 | 0.0 | 16 | 0.4 | 32 | 0.8 |
| IOWA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MISSOURI | 16 | 1.9 | 0 | 0.0 | 16 | 1.9 | 32 | 3.8 |
| NEBRASKA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| KANSAS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 57

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION VIII | 0 | 0.0 | 7 | 0.8 | 8 | 0.8 | 0 | 0.0 |
| NORTH DAKOTA | 0 | 0.0 | 7 | 5.4 | 0 | 0.0 | 0 | 0.0 |
| SOUTH DAKOTA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MONTANA | 0 | 0.0 | 0 | 0.0 | 8 | 5.7 | 0 | 0.0 |
| WYOMING | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| COLORADO | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| UTAH | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 57 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION VIII | 0 | 0.0 | 0 | 0.0 | 17 | 0.8 | 32 | 2.4 |
| NORTH DAKOTA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 5.4 |
| SOUTH DAKOTA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MONTANA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 5.7 |
| WYOMING | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| COLORADO | 0 | 0.0 | 0 | 0.0 | 17 | 4.0 | 17 | 4.0 |
| UTAH | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 58

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION IX | 14 | 0.4 | 56 | 1.5 | 0 | 0.0 | 0 | 0.0 |
| CALIFORNIA | 7 | 0.2 | 20 | 0.6 | 0 | 0.0 | 0 | 0.0 |
| ARIZONA | 7 | 2.1 | 36 | 10.5 | 0 | 0.0 | 0 | 0.0 |
| NEVADA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| HAWAII | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 58 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION IX | 0 | 0.0 | 0 | 0.0 | 7 | 0.2 | 77 | 2.1 |
| CALIFORNIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 27 | 0.8 |
| ARIZONA | 0 | 0.0 | 0 | 0.0 | 7 | 2.1 | 50 | 14.8 |
| NEVADA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| HAWAII | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 59

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION X | 8 | 0.7 | 18 | 1.4 | 0 | 0.0 | 8 | 0.7 |
| IDAHO | 0 | 0.0 | 18 | 14.8 | 0 | 0.0 | 0 | 0.0 |
| WASHINGTON | 8 | 1.4 | 0 | 0.0 | 0 | 0.0 | 8 | 1.4 |
| OREGON | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| ALASKA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 59 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION X | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 34 | 2.8 |
| IDAHO | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 18 | 14.8 |
| WASHINGTON | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 16 | 2.9 |
| OREGON | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| ALASKA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 60

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS IN THE UNITED STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| REGIONS | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| I | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| II | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| III | 0 | 0.0 | 0 | 0.0 | 41 | 0.7 | 0 | 0.0 |
| IV | 63 | 1.2 | 24 | 0.4 | 69 | 1.3 | 55 | 0.9 |
| V | 15 | 0.2 | 0 | 0.0 | 7 | 0.1 | 0 | 0.0 |
| VI | 8 | 0.2 | 58 | 1.5 | 28 | 0.7 | 18 | 0.5 |
| VII | 0 | 0.0 | 0 | 0.0 | 22 | 1.1 | 7 | 0.4 |
| VIII | 0 | 0.0 | 17 | 0.8 | 0 | 0.0 | 12 | 1.5 |
| IX | 41 | 1.2 | 56 | 1.5 | 0 | 0.0 | 7 | 0.2 |
| X | 0 | 0.0 | 0 | 0.0 | 6 | 0.7 | 0 | 0.0 |
| U.S. TOTAL | 127 | 0.4 | 155 | 0.4 | 173 | 0.5 | 99 | 0.3 |

TABLE 60 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS IN THE UNITED STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| REGIONS | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| I | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| II | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| III | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 41 | 0.7 |
| IV | 0 | 0.0 | 0 | 0.0 | 14 | 0.3 | 225 | 4.1 |
| V | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 | 28 | 0.4 |
| VI | 16 | 0.5 | 0 | 0.0 | 16 | 0.5 | 144 | 3.9 |
| VII | 0 | 0.0 | 0 | 0.0 | 9 | 0.4 | 38 | 1.9 |
| VIII | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 29 | 2.3 |
| IX | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 104 | 2.9 |
| X | 0 | 0.0 | 9 | 0.7 | 9 | 0.7 | 24 | 2.1 |
| U.S. TOTAL | 16 | 0.0 | 9 | 0.0 | 54 | 0.2 | 633 | 1.8 |

## TABLE 61

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION I | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MAINE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NEW HAMPSHIRE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| VERMONT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MASSACHUSETTS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| RHODE ISLAND | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| CONNECTICUT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 61 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION I | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MAINE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NEW HAMPSHIRE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| VERMONT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MASSACHUSETTS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| RHODE ISLAND | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| CONNECTICUT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 62

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION II | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NEW YORK | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NEW JERSEY | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 62 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION II | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NEW YORK | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NEW JERSEY | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 63

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION III | 0 | 0.0 | 0 | 0.0 | 41 | 0.7 | 0 | 0.0 |
| PENNSYLVANIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| DELAWARE | 0 | 0.0 | 0 | 0.0 | 41 | 54.7 | 0 | 0.0 |
| MARYLAND | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| DISTRICT OF COLUMBIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| VIRGINIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| WEST VIRGINIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 63 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION III | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 41 | 0.7 |
| PENNSYLVANIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| DELAWARE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 41 | 54.7 |
| MARYLAND | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| DISTRICT OF COLUMBIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| VIRGINIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| WEST VIRGINIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 64

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION IV | 63 | 1.2 | 24 | 0.4 | 69 | 1.3 | 55 | 0.9 |
| NORTH CAROLINA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| SOUTH CAROLINA | 0 | 0.0 | 8 | 1.9 | 0 | 0.0 | 0 | 0.0 |
| GEORGIA | 63 | 8.0 | 0 | 0.0 | 21 | 2.7 | 14 | 1.8 |
| FLORIDA | 0 | 0.0 | 16 | 1.3 | 0 | 0.0 | 41 | 3.2 |
| KENTUCKY | 0 | 0.0 | 0 | 0.0 | 26 | 4.5 | 0 | 0.0 |
| TENNESSEE | 0 | 0.0 | 0 | 0.0 | 14 | 1.9 | 0 | 0.0 |
| ALABAMA | 0 | 0.0 | 0 | 0.0 | 8 | 1.3 | 0 | 0.0 |
| MISSISSIPPI | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

### TABLE 64 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION IV | 0 | 0.0 | 0 | 0.0 | 14 | 0.3 | 225 | 4.1 |
| NORTH CAROLINA | 0 | 0.0 | 0 | 0.0 | 14 | 1.8 | 14 | 1.8 |
| SOUTH CAROLINA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 1.9 |
| GEORGIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 98 | 12.5 |
| FLORIDA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 57 | 4.4 |
| KENTUCKY | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 26 | 4.5 |
| TENNESSEE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 14 | 1.9 |
| ALABAMA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 1.3 |
| MISSISSIPPI | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 65

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION V | 15 | 0.2 | 0 | 0.0 | 7 | 0.1 | 0 | 0.0 |
| OHIO | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| INDIANA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| ILLINOIS | 15 | 0.7 | 0 | 0.0 | 7 | 0.3 | 0 | 0.0 |
| MICHIGAN | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| WISCONSIN | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MINNESOTA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 65 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION V | 0 | 0.0 | 0 | 0.0 | 6 | 0.1 | 28 | 0.4 |
| OHIO | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| INDIANA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| ILLINOIS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 22 | 1.1 |
| MICHIGAN | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| WISCONSIN | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MINNESOTA | 0 | 0.0 | 0 | 0.0 | 6 | 0.8 | 6 | 0.8 |

## TABLE 66

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION VI | 8 | 0.2 | 58 | 1.5 | 28 | 0.7 | 18 | 0.5 |
| ARKANSAS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| LOUISIANA | 0 | 0.0 | 19 | 2.8 | 0 | 0.0 | 0 | 0.0 |
| OKLAHOMA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 10 | 2.0 |
| TEXAS | 8 | 0.3 | 39 | 1.8 | 8 | 0.3 | 8 | 0.3 |
| NEW MEXICO | 0 | 0.0 | 0 | 0.0 | 20 | 11.0 | 0 | 0.0 |

TABLE 66 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION VI | 16 | 0.5 | 0 | 0.0 | 16 | 0.5 | 144 | 3.9 |
| ARKANSAS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| LOUISIANA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 19 | 2.8 |
| OKLAHOMA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 10 | 2.0 |
| TEXAS | 16 | 0.7 | 0 | 0.0 | 16 | 0.7 | 95 | 4.4 |
| NEW MEXICO | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 20 | 11.0 |

## TABLE 67

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION VII | 0 | 0.0 | 0 | 0.0 | 22 | 1.1 | 7 | 0.4 |
| IOWA | 0 | 0.0 | 0 | 0.0 | 9 | 1.7 | 0 | 0.0 |
| MISSOURI | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NEBRASKA | 0 | 0.0 | 0 | 0.0 | 6 | 2.2 | 0 | 0.0 |
| KANSAS | 0 | 0.0 | 0 | 0.0 | 7 | 1.5 | 7 | 1.5 |

TABLE 67 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION VII | 0 | 0.0 | 0 | 0.0 | 9 | 0.4 | 38 | 1.9 |
| IOWA | 0 | 0.0 | 0 | 0.0 | 9 | 1.7 | 18 | 3.4 |
| MISSOURI | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NEBRASKA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 2.2 |
| KANSAS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 14 | 3.1 |

## TABLE 68

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION VIII | 0 | 0.0 | 17 | 0.8 | 0 | 0.0 | 12 | 1.5 |
| NORTH DAKOTA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 5.4 |
| SOUTH DAKOTA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MONTANA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| WYOMING | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| COLORADO | 0 | 0.0 | 17 | 4.0 | 0 | 0.0 | 0 | 0.0 |
| UTAH | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 2.9 |

## TABLE 68 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION VIII | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 29 | 2.3 |
| NORTH DAKOTA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 5.4 |
| SOUTH DAKOTA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MONTANA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| WYOMING | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| COLORADO | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 17 | 4.0 |
| UTAH | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 2.9 |

## TABLE 69

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION IX | 41 | 1.2 | 56 | 1.5 | 0 | 0.0 | 7 | 0.2 |
| CALIFORNIA | 20 | 0.6 | 20 | 0.6 | 0 | 0.0 | 7 | 0.2 |
| ARIZONA | 21 | 6.3 | 36 | 10.5 | 0 | 0.0 | 0 | 0.0 |
| NEVADA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| HAWAII | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 69 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION IX | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 104 | 2.9 |
| CALIFORNIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 47 | 1.5 |
| ARIZONA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 57 | 16.9 |
| NEVADA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| HAWAII | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 70

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION X | 0 | 0.0 | 0 | 0.0 | 6 | 0.7 | 0 | 0.0 |
| IDAHO | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| WASHINGTON | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| OREGON | 0 | 0.0 | 0 | 0.0 | 6 | 1.8 | 0 | 0.0 |
| ALASKA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 70 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION X | 0 | 0.0 | 9 | 0.7 | 9 | 0.7 | 24 | 2.1 |
| IDAHO | 0 | 0.0 | 9 | 7.4 | 9 | 7.4 | 18 | 14.8 |
| WASHINGTON | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| OREGON | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 1.8 |
| ALASKA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 71

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| REGIONS | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| I | 0 | 0.0 | 0 | 0.0 | 22 | 0.9 | 0 | 0.0 |
| II | 0 | 0.0 | 0 | 0.0 | 17 | 0.6 | 8 | 0.3 |
| III | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| IV | 42 | 0.8 | 63 | 1.1 | 72 | 1.3 | 46 | 0.8 |
| V | 7 | 0.1 | 27 | 0.3 | 7 | 0.1 | 0 | 0.0 |
| VI | 23 | 0.7 | 66 | 1.8 | 67 | 1.8 | 0 | 0.0 |
| VII | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 15 | 0.7 |
| VIII | 0 | 0.0 | 0 | 0.0 | 23 | 3.0 | 0 | 0.0 |
| IX | 0 | 0.0 | 41 | 1.2 | 13 | 0.4 | 13 | 0.4 |
| X | 9 | 0.2 | 9 | 0.2 | 6 | 0.2 | 17 | 0.4 |
| TOTAL | 81 | 0.4 | 206 | 0.6 | 227 | 0.7 | 99 | 0.2 |

TABLE 71 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| REGIONS | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| I | 19 | 0.9 | 0 | 0.0 | 0 | 0.0 | 41 | 1.7 |
| II | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 25 | 0.8 |
| III | 0 | 0.0 | 0 | 0.0 | 15 | 0.5 | 15 | 0.5 |
| IV | 16 | 0.3 | 7 | 0.1 | 50 | 0.9 | 296 | 5.3 |
| V | 7 | 0.1 | 0 | 0.0 | 0 | 0.0 | 48 | 0.7 |
| VI | 41 | 1.1 | 10 | 0.2 | 16 | 0.4 | 223 | 6.0 |
| VII | 8 | 0.4 | 0 | 0.0 | 6 | 0.4 | 29 | 1.5 |
| VIII | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 23 | 3.0 |
| IX | 7 | 0.2 | 0 | 0.0 | 7 | 0.2 | 81 | 2.3 |
| X | 9 | 0.2 | 0 | 0.0 | 0 | 0.0 | 50 | 1.2 |
| TOTAL | 107 | 0.3 | 17 | 0.1 | 94 | 0.3 | 831 | 2.5 |

## TABLE 72

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION I | 0 | 0.0 | 0 | 0.0 | 22 | 0.9 | 0 | 0.0 |
| MAINE | 0 | 0.0 | 0 | 0.0 | 22 | 12.8 | 0 | 0.0 |
| NEW HAMPSHIRE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| VERMONT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MASSACHUSETTS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| RHODE ISLAND | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| CONNECTICUT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 72 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION I | 19 | 0.9 | 0 | 0.0 | 0 | 0.0 | 41 | 1.7 |
| MAINE | 11 | 6.4 | 0 | 0.0 | 0 | 0.0 | 33 | 19.0 |
| NEW HAMPSHIRE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| VERMONT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MASSACHUSETTS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| RHODE ISLAND | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| CONNECTICUT | 8 | 1.8 | 0 | 0.0 | 0 | 0.0 | 8 | 1.8 |

# TABLE 73

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION II | 0 | 0.0 | 0 | 0.0 | 17 | 0.6 | 8 | 0.3 |
| NEW YORK | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NEW JERSEY | 0 | 0.0 | 0 | 0.0 | 17 | 1.7 | 8 | 0.9 |

## TABLE 73 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION II | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 25 | 0.8 |
| NEW YORK | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| NEW JERSEY | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 25 | 2.6 |

## TABLE 74

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION III | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| PENNSYLVANIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| DELAWARE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MARYLAND | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| DISTRICT OF COLUMBIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| VIRGINIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| WEST VIRGINIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 74 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION III | 0 | 0.0 | 0 | 0.0 | 15 | 0.5 | 15 | 0.5 |
| PENNSYLVANIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| DELAWARE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MARYLAND | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| DISTRICT OF COLUMBIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| VIRGINIA | 0 | 0.0 | 0 | 0.0 | 15 | 2.2 | 15 | 2.2 |
| WEST VIRGINIA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 75

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION IV | 42 | 0.8 | 63 | 1.1 | 72 | 1.3 | 46 | 0.8 |
| NORTH CAROLINA | 0 | 0.0 | 0 | 0.0 | 29 | 3.6 | 14 | 1.8 |
| SOUTH CAROLINA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 17 | 3.8 |
| GEORGIA | 42 | 5.4 | 14 | 1.8 | 21 | 2.7 | 7 | 0.9 |
| FLORIDA | 0 | 0.0 | 49 | 3.8 | 0 | 0.0 | 8 | 0.6 |
| KENTUCKY | 0 | 0.0 | 0 | 0.0 | 7 | 1.1 | 0 | 0.0 |
| TENNESSEE | 0 | 0.0 | 0 | 0.0 | 7 | 0.9 | 0 | 0.0 |
| ALABAMA | 0 | 0.0 | 0 | 0.0 | 8 | 1.3 | 0 | 0.0 |
| MISSISSIPPI | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 75 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION IV | 16 | 0.3 | 7 | 0.1 | 50 | 0.9 | 296 | 5.3 |
| NORTH CAROLINA | 0 | 0.0 | 0 | 0.0 | 29 | 3.6 | 72 | 9.1 |
| SOUTH CAROLINA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 17 | 3.8 |
| GEORGIA | 0 | 0.0 | 7 | 0.9 | 21 | 2.7 | 112 | 14.3 |
| FLORIDA | 8 | 0.6 | 0 | 0.0 | 0 | 0.0 | 65 | 5.0 |
| KENTUCKY | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 1.1 |
| TENNESSEE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 0.9 |
| ALABAMA | 8 | 1.3 | 0 | 0.0 | 0 | 0.0 | 16 | 2.5 |
| MISSISSIPPI | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 76

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION V | 7 | 0.1 | 27 | 0.3 | 7 | 0.1 | 0 | 0.0 |
| OHIO | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| INDIANA | 0 | 0.0 | 10 | 1.3 | 0 | 0.0 | 0 | 0.0 |
| ILLINOIS | 7 | 0.4 | 7 | 0.4 | 7 | 0.4 | 0 | 0.0 |
| MICHIGAN | 0 | 0.0 | 10 | 0.7 | 0 | 0.0 | 0 | 0.0 |
| WISCONSIN | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MINNESOTA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 76 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION V | 7 | 0.1 | 0 | 0.0 | 0 | 0.0 | 48 | 0.7 |
| OHIO | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| INDIANA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 10 | 1.3 |
| ILLINOIS | 7 | 0.4 | 0 | 0.0 | 0 | 0.0 | 28 | 1.6 |
| MICHIGAN | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 10 | 0.7 |
| WISCONSIN | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MINNESOTA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 77

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION VI | 23 | 0.7 | 66 | 1.8 | 67 | 1.8 | 0 | 0.0 |
| ARKANSAS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| LOUISIANA | 0 | 0.0 | 19 | 2.9 | 0 | 0.0 | 0 | 0.0 |
| OKLAHOMA | 0 | 0.0 | 0 | 0.0 | 10 | 2.0 | 0 | 0.0 |
| TEXAS | 23 | 1.1 | 47 | 2.2 | 47 | 2.2 | 0 | 0.0 |
| NEW MEXICO | 0 | 0.0 | 0 | 0.0 | 10 | 5.5 | 0 | 0.0 |

## TABLE 77 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION VI | 41 | 1.1 | 10 | 0.2 | 16 | 0.4 | 223 | 6.0 |
| ARKANSAS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| LOUISIANA | 10 | 1.4 | 0 | 0.0 | 0 | 0.0 | 29 | 4.3 |
| OKLAHOMA | 0 | 0.0 | 10 | 2.0 | 0 | 0.0 | 20 | 2.0 |
| TEXAS | 31 | 1.5 | 0 | 0.0 | 16 | 0.7 | 164 | 7.9 |
| NEW MEXICO | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 10 | 5.5 |

# TABLE 78

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION VII | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 15 | 0.7 |
| IOWA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MISSOURI | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 1.0 |
| NEBRASKA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| KANSAS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 1.6 |

## TABLE 78 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION VII | 8 | 0.4 | 0 | 0.0 | 6 | 0.4 | 29 | 1.5 |
| IOWA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MISSOURI | 8 | 1.0 | 0 | 0.0 | 0 | 0.0 | 16 | 2.0 |
| NEBRASKA | 0 | 0.0 | 0 | 0.0 | 6 | 2.2 | 6 | 2.2 |
| KANSAS | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 1.6 |

## TABLE 79

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION VIII | 0 | 0.0 | 0 | 0.0 | 23 | 3.0 | 0 | 0.0 |
| NORTH DAKOTA | 0 | 0.0 | 0 | 0.0 | 14 | 10.8 | 0 | 0.0 |
| SOUTH DAKOTA | 0 | 0.0 | 0 | 0.0 | 4 | 3.2 | 0 | 0.0 |
| MONTANA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| WYOMING | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| COLORADO | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| UTAH | 0 | 0.0 | 0 | 0.0 | 5 | 3.0 | 0 | 0.0 |

## TABLE 79 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION VIII | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 23 | 3.0 |
| NORTH DAKOTA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 14 | 10.8 |
| SOUTH DAKOTA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 4 | 3.2 |
| MONTANA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| WYOMING | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| COLORADO | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| UTAH | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 3.0 |

## TABLE 80

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION IX | 0 | 0.0 | 41 | 1.2 | 13 | 0.4 | 13 | 0.4 |
| CALIFORNIA | 0 | 0.0 | 13 | 0.4 | 13 | 0.4 | 7 | 0.2 |
| ARIZONA | 0 | 0.0 | 28 | 8.5 | 0 | 0.0 | 0 | 0.0 |
| NEVADA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| HAWAII | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 8.5 |

## TABLE 80 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION IX | 7 | 0.2 | 0 | 0.0 | 7 | 0.2 | 81 | 2.3 |
| CALIFORNIA | 0 | 0.0 | 0 | 0.0 | 7 | 0.2 | 40 | 1.3 |
| ARIZONA | 7 | 2.1 | 0 | 0.0 | 0 | 0.0 | 35 | 10.6 |
| NEVADA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| HAWAII | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 8.5 |

## TABLE 81

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | | COMMERCIAL APPLICATOR | | FARMER | | AGRICULTURAL WORKER | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION X | 9 | 0.2 | 9 | 0.2 | 6 | 0.2 | 17 | 0.4 |
| IDAHO | 9 | 7.4 | 9 | 7.4 | 0 | 0.0 | 9 | 7.4 |
| WASHINGTON | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 1.5 |
| OREGON | 0 | 0.0 | 0 | 0.0 | 6 | 1.9 | 0 | 0.0 |
| ALASKA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

TABLE 81 (CONTINUED)

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | | PROFESSIONAL OR SEMI-PROFESSIONAL | | UNKNOWN OR NOT CLASSIFIED | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE | ESTIMATED | RATE |
| REGION X | 9 | 0.2 | 0 | 0.0 | 0 | 0.0 | 50 | 1.2 |
| IDAHO | 9 | 7.4 | 0 | 0.0 | 0 | 0.0 | 36 | 29.8 |
| WASHINGTON | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 1.5 |
| OREGON | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 1.9 |
| ALASKA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 82

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, BY MAJOR PESTICIDE CLASS IN THE UNITED STATES IN 1971, 1972, AND 1973.

| | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| ORGANOPHOSPHATSES | 572 | 1.8 | 454 | 1.4 | 544 | 1.7 |
| CHLORINATED HYDROCARBON INSECTICIDES | 40 | 0.1 | 70 | 0.2 | 101 | 0.3 |
| CHLORINATED HYDROCARBON HERBICIDES, FUNGICIDES, ETC. | 39 | 0.1 | 32 | 0.1 | 39 | 0.1 |
| CARBAMATES, AMIDES & RELATED COMPOUNDS | 51 | 0.2 | 39 | 0.1 | 95 | 0.3 |
| ARSENIC | 23 | 0.1 | 8 | 0.0 | 7 | 0.0 |
| OTHER | 45 | 0.1 | 17 | 0.1 | 54 | 0.2 |
| TOTAL | 770 | 2.4 | 620 | 1.9 | 840 | 2.6 |

## TABLE 83

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY MAJOR PESTICIDE CLASS, EPA REGIONS 1971.

| REGION | ORGANOPHOSPHATES | CHLORINATED HYDROCARBON INSECTICIDES | CHLORINATED HYDROCARBON HERBICIDES FUNGICIDES, ETC. | CARBAMATES, AMIDES & RELATED COMPOUNDS | ARSENIC | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|
| I | 0 | 0 | 0 | 0 | 0 | 7 | 7 |
| II | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| III | 8 | 0 | 0 | 0 | 0 | 0 | 8 |
| IV | 242 | 8 | 23 | 30 | 15 | 15 | 333 |
| V | 24 | 0 | 8 | 0 | 0 | 0 | 32 |
| VI | 199 | 8 | 8 | 0 | 8 | 8 | 231 |
| VII | 23 | 8 | 0 | 0 | 0 | 0 | 31 |
| VIII | 0 | 16 | 0 | 0 | 0 | 8 | 24 |
| IX | 61 | 0 | 0 | 14 | 0 | 0 | 75 |
| X | 15 | 0 | 0 | 7 | 0 | 7 | 29 |
| U.S. TOTAL | 572 | 40 | 39 | 51 | 23 | 45 | 770 |

## TABLE 84

RATES PER 100,000 HOSPITAL ADMISSIONS OF OCCUPATIONAL PESTICIDE POISONINGS BY MAJOR PESTICIDE CLASS, EPA REGIONS, 1971.

| REGION | ORGANOPHOSPHATES | CHLORINATED HYDROCARBON INSECTICIDES | CHLORINATED HYDROCARBON HERBICIDES FUNGICIDES, ETC. | CARBAMATES, AMIDES & RELATED COMPOUNDS | ARSENIC | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|
| I | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.4 |
| II | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| III | 0.2 | 0.0 | 0.0 | 0.0 |  | 0.0 | 0.2 |
| IV | 4.3 | 0.1 | 0.4 | 0.5 | 0.3 | 0.3 | 5.9 |
| V | 0.3 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.5 |
| VI | 5.3 | 0.2 | 0.2 | 0.0 | 0.2 | 0.2 | 6.2 |
| VII | 1.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 |
| VIII | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 | 0.8 | 2.3 |
| IX | 1.7 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 2.1 |
| X | 1.4 | 0.0 | 0.0 | 0.7 | 0.0 | 0.7 | 2.8 |
| U.S. TOTAL | 1.8 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 2.4 |

## TABLE 85

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY MAJOR PESTICIDE CLASS, EPA REGIONS 1972.

| REGION | ORGANOPHOSPHATES | CHLORINATED HYDROCARBON INSECTICIDES | CHLORINATED HYDROCARBON HERBICIDES FUNGICIDES, ETC. | CARBAMATES, AMIDES & RELATED COMPOUNDS | ARSENIC | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|
| I | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| II | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| III | 24 | 0 | 0 | 0 | 0 | 0 | 24 |
| IV | 174 | 38 | 8 | 8 | 8 | 0 | 236 |
| V | 24 | 0 | 8 | 0 | 0 | 0 | 32 |
| VI | 91 | 17 | 8 | 8 | 0 | 17 | 141 |
| VII | 15 | 8 | 8 | 8 | 0 | 0 | 39 |
| VIII | 16 | 0 | 0 | 8 | 0 | 0 | 24 |
| IX | 95 | 0 | 0 | 7 | 0 | 0 | 102 |
| X | 15 | 7 | 0 | 0 | 0 | 0 | 22 |
| U.S. TOTAL | 454 | 70 | 32 | 39 | 8 | 17 | 620 |

## TABLE 86

RATES PER 100,000 HOSPITAL ADMISSIONS OF OCCUPATIONAL PESTICIDE POISONINGS BY MAJOR PESTICIDE CLASS, EPA REGIONS, 1972.

| REGION | ORGANOPHOSPHATES | CHLORINATED HYDROCARBON INSECTICIDES | CHLORINATED HYDROCARBON HERBICIDES FUNGICIDES, ETC. | CARBAMATES, AMIDES & RELATED COMPOUNDS | ARSENIC | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|
| I | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| II | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| III | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 |
| IV | 3.1 | 0.7 | 0.1 | 0.1 | 0.1 | 0.1 | 4.1 |
| V | 0.3 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.5 |
| VI | 2.4 | 0.4 | 0.2 | 0.2 | 0.0 | 0.4 | 3.7 |
| VII | 0.7 | 0.4 | 0.4 | 0.4 | 0.0 | 0.0 | 1.9 |
| VIII | 1.5 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 2.3 |
| IX | 2.7 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 2.9 |
| X | 1.4 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 |
| U.S. TOTAL | 1.4 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 1.9 |

## TABLE 87

ESTIMATED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY MAJOR PESTICIDE CLASS, EPA REGIONS 1973.

| REGION | ORGANOPHOSPHATES | CHLORINATED HYDROCARBON INSECTICIDES | CHLORINATED HYDROCARBON HERBICIDES FUNGICIDES, ETC. | CARBAMATES, AMIDES & RELATED COMPOUNDS | ARSENIC | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|
| I | 7 | 15 | 0 | 7 | 0 | 0 | 29 |
| II | 20 | 0 | 0 | 10 | 0 | 0 | 30 |
| III | 16 | 0 | 0 | 0 | 0 | 0 | 16 |
| IV | 174 | 53 | 23 | 53 | 0 | 0 | 303 |
| V | 33 | 0 | 8 | 8 | 0 | 0 | 49 |
| VI | 157 | 25 | 8 | 17 | 0 | 17 | 224 |
| VII | 8 | 8 | 0 | 0 | 0 | 15 | 31 |
| VIII | 24 | 0 | 0 | 0 | 0 | 8 | 32 |
| IX | 68 | 0 | 0 | 0 | 7 | 7 | 82 |
| X | 37 | 0 | 0 | 0 | 0 | 7 | 44 |
| U.S. TOTAL | 544 | 101 | 39 | 95 | 7 | 54 | 840 |

## TABLE 88

RATES PER 100,000 HOSPITAL ADMISSIONS OF OCCUPATIONAL PESTICIDE POISONINGS BY MAJOR PESTICIDE CLASS, EPA REGIONS, 1973.

| REGION | ORGANOPHOSPHATES | CHLORINATED HYDROCARBON INSECTICIDES | CHLORINATED HYDROCARBON HERBICIDES FUNGICIDES, ETC. | CARBAMATES, AMIDES & RELATED COMPOUNDS | ARSENIC | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|
| I | 0.4 | 0.8 | 0.0 | 0.4 | 0.0 | 0.0 | 1.7 |
| II | 0.6 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.8 |
| III | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| IV | 3.1 | 0.9 | 0.4 | 0.9 | 0.0 | 0.0 | 5.3 |
| V | 0.5 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.7 |
| VI | 4.2 | 0.7 | 0.2 | 0.4 | 0.0 | 0.4 | 5.9 |
| VII | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.7 | 1.5 |
| VIII | 2.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 3.0 |
| IX | 1.9 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 2.3 |
| X | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 4.2 |
| U.S. TOTAL | 1.7 | 0.3 | 0.1 | 0.3 | 0.0 | 0.2 | 2.6 |

## TABLE 89

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, FOR CHILDREN 0-4 YEARS OF AGE IN THE UNITED STATES IN 1971, 1972, AND 1973.

| YEAR | ESTIMATED NUMBER | RATE |
|---|---|---|
| 1971 | 995 | 3.0 |
| 1972 | 1231 | 3.7 |
| 1973 | 1001 | 3.1 |

## TABLE 90

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, FOR CHILDREN 0-4 YEARS OF AGE, EPA REGIONS IN 1971, 1972, AND 1973.

| EPA REGION | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| I | 21 | 1.3 | 34 | 1.7 | 6 | 0.4 |
| II | 29 | 0.8 | 38 | 1.1 | 51 | 1.4 |
| III | 128 | 2.9 | 230 | 5.4 | 94 | 2.0 |
| IV | 128 | 2.3 | 185 | 3.3 | 111 | 2.0 |
| V | 284 | 4.1 | 309 | 4.4 | 286 | 4.1 |
| VI | 110 | 2.9 | 131 | 3.5 | 70 | 2.0 |
| VII | 46 | 2.2 | 64 | 3.0 | 74 | 3.7 |
| VIII | 22 | 1.5 | 11 | 1.5 | 21 | 1.5 |
| IX | 205 | 5.9 | 186 | 5.4 | 258 | 7.3 |
| X | 22 | 2.1 | 43 | 4.2 | 30 | 2.8 |
| U.S. TOTAL | 995 | 3.0 | 1231 | 3.7 | 1001 | 3.1 |

TABLE 91

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, FOR CHILDREN 0-4 YEARS OF AGE, REGION I AND STATES IN 1971, 1972, AND 1973.

| REGION & STATE | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION I | 21 | 1.3 | 34 | 1.7 | 6 | 0.4 |
| MAINE | 0 | 0.0 | 22 | 12.8 | 0 | 0.0 |
| NEW HAMPSHIRE | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| VERMONT | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| MASSACHUSETTS | 6 | 0.7 | 12 | 1.5 | 6 | 0.7 |
| RHODE ISLAND | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| CONNECTICUT | 15 | 3.6 | 0 | 0.0 | 0 | 0.0 |

## TABLE 92

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, FOR CHILDREN 0-4 YEARS OF AGE, REGION II AND STATES IN 1971, 1972, AND 1973.

| REGION & STATE | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION II | 29 | 0.8 | 38 | 1.1 | 51 | 1.4 |
| NEW YORK | 21 | 0.8 | 21 | 0.6 | 43 | 1.6 |
| NEW JERSEY | 8 | 0.9 | 17 | 1.8 | 8 | 0.9 |

## TABLE 93

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, FOR CHILDREN 0-4 YEARS OF AGE, REGION III AND STATES IN 1971, 1972, AND 1973.

| REGION & STATE | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION III | 128 | 2.9 | 230 | 5.4 | 94 | 2.0 |
| PENNSYLVANIA | 53 | 3.0 | 74 | 4.2 | 63 | 3.6 |
| DELAWARE | 27 | 36.5 | 0 | 0.0 | 0 | 0.0 |
| MARYLAND | 13 | 2.7 | 6 | 1.4 | 0 | 0.0 |
| DISTRICT OF COLUMBIA | 31 | 16.5 | 126 | 66.1 | 31 | 16.5 |
| VIRGINIA | 0 | 0.0 | 15 | 2.2 | 0 | 0.0 |
| WEST VIRGINIA | 4 | 1.2 | 9 | 2.3 | 0 | 0.0 |

## TABLE 94

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, FOR CHILDREN 0-4 YEARS OF AGE, REGION IV AND STATES IN 1971, 1972, AND 1973.

| REGION & STATE | 1971 |  | 1972 |  | 1973 |  |
|---|---|---|---|---|---|---|
|  | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION IV | 128 | 2.3 | 185 | 3.3 | 111 | 2.0 |
| NORTH CAROLINA | 14 | 1.8 | 50 | 6.4 | 14 | 1.8 |
| SOUTH CAROLINA | 0 | 0.0 | 8 | 1.9 | 16 | 3.8 |
| GEORGIA | 14 | 1.8 | 7 | 0.9 | 0 | 0.0 |
| FLORIDA | 41 | 3.2 | 8 | 0.6 | 16 | 1.3 |
| KENTUCKY | 20 | 3.4 | 39 | 6.7 | 13 | 2.2 |
| TENNESSEE | 14 | 1.9 | 21 | 2.8 | 21 | 2.8 |
| ALABAMA | 15 | 2.5 | 31 | 5.0 | 31 | 5.0 |
| MISSISSIPPI | 10 | 2.5 | 21 | 5.0 | 0 | 0.0 |

## TABLE 95

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, FOR CHILDREN 0-4 YEARS OF AGE, REGION V AND STATES IN 1971, 1972, AND 1973.

| REGION & STATE | 1971 |  | 1972 |  | 1973 |  |
|---|---|---|---|---|---|---|
|  | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION V | 284 | 4.1 | 309 | 4.4 | 286 | 4.1 |
| OHIO | 43 | 2.6 | 61 | 3.6 | 61 | 3.6 |
| INDIANA | 10 | 1.3 | 10 | 1.3 | 21 | 2.6 |
| ILLINOIS | 96 | 5.2 | 141 | 7.6 | 134 | 7.2 |
| MICHIGAN | 72 | 5.2 | 52 | 3.7 | 31 | 2.2 |
| WISCONSIN | 28 | 3.8 | 21 | 2.8 | 21 | 2.8 |
| MINNESOTA | 35 | 5.2 | 24 | 3.5 | 18 | 2.6 |

## TABLE 96

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, FOR CHILDREN 0-4 YEARS OF AGE, REGION VI AND STATES IN 1971, 1972, AND 1973.

| REGION & STATE | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION VI | 110 | 2.9 | 131 | 3.5 | 70 | 2.0 |
| ARKANSAS | 7 | 2.0 | 22 | 5.9 | 0 | 0.0 |
| LOUISIANA | 29 | 4.3 | 29 | 4.3 | 0 | 0.0 |
| OKLAHOMA | 10 | 2.0 | 0 | 0.0 | 0 | 0.0 |
| TEXAS | 54 | 2.6 | 70 | 3.4 | 70 | 3.4 |
| NEW MEXICO | 10 | 5.5 | 10 | 5.5 | 0 | 0.0 |

## TABLE 97

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, FOR CHILDREN 0-4 YEARS OF AGE, REGION VII AND STATES IN 1971, 1972, AND 1973.

| REGION & STATE | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION VII | 46 | 2.2 | 64 | 3.0 | 74 | 3.7 |
| IOWA | 18 | 3.5 | 28 | 5.2 | 18 | 3.5 |
| MISSOURI | 8 | 1.0 | 16 | 1.9 | 16 | 1.9 |
| NEBRASKA | 0 | 0.0 | 0 | 0.0 | 6 | 2.2 |
| KANSAS | 20 | 4.8 | 20 | 4.8 | 34 | 8.0 |

### TABLE 98

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, FOR CHILDREN 0-4 YEARS OF AGE, REGION VIII AND STATES IN 1971, 1972 AND 1973.

| REGION & STATE | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION VIII | 22 | 1.5 | 11 | 1.5 | 21 | 1.5 |
| NORTH DAKOTA | 0 | 0.0 | 7 | 5.4 | 0 | 0.0 |
| SOUTH DAKOTA | 0 | 0.0 | 4 | 3.2 | 4 | 3.2 |
| MONTANA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| WYOMING | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| COLORADO | 17 | 4.0 | 0 | 0.0 | 17 | 4.0 |
| UTAH | 5 | 3.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 99

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, FOR CHILDREN 0-4 YEARS OF AGE, REGION IX AND STATES IN 1971, 1972, AND 1973.

| REGION & STATE | 1971 |  | 1972 |  | 1973 |  |
|---|---|---|---|---|---|---|
|  | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION IX | 205 | 5.9 | 186 | 5.4 | 258 | 7.5 |
| CALIFORNIA | 198 | 6.5 | 172 | 5.7 | 238 | 7.9 |
| ARIZONA | 7 | 2.1 | 14 | 4.2 | 14 | 4.2 |
| NEVADA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| HAWAII | 0 | 0.0 | 0 | 0.0 | 6 | 8.5 |

## TABLE 100

ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS AND RATES PER 100,000 HOSPITAL ADMISSIONS, FOR CHILDREN 0-4 YEARS OF AGE, REGION X AND STATES IN 1971, 1972, AND 1973.

| REGION & STATE | 1971 | | 1972 | | 1973 | |
|---|---|---|---|---|---|---|
| | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE | ESTIMATED NUMBER | RATE |
| REGION X | 22 | 2.1 | 43 | 4.2 | 30 | 2.8 |
| IDAHO | 0 | 0.0 | 0 | 0.0 | 9 | 7.5 |
| WASHINGTON | 16 | 2.9 | 24 | 4.4 | 8 | 1.5 |
| OREGON | 6 | 1.9 | 19 | 5.6 | 13 | 3.7 |
| ALASKA | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

## TABLE 101

OBSERVED AND ESTIMATED NUMBERS OF HOSPITAL ADMITTED PESTICIDE POISONING DEATHS BY AGE GROUP AND CAUSE OF EXPOSURE IN THE UNITED STATES FOR 1971, 1972, AND 1973.*

| | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| AGE | OBSERVED | ESTIMATED | OBSERVED | ESTIMATED | OBSERVED | ESTIMATED |
| 0-4 | 0 | 0 | 1 | 8 | 0 | 0 |
| 5-9 | 0 | 0 | 1 | 8 | 0 | 0 |
| 10-14 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15-19 | 0 | 0 | 1 | 8 | 3 | 24 |
| 20-24 | 0 | 0 | 0 | 0 | 2 | 16 |
| 25-34 | 1 | 8 | 1 | 8 | 3 | 24 |
| 35-44 | 0 | 0 | 0 | 0 | 2 | 16 |
| 45-54 | 0 | 0 | 0 | 0 | 2 | 16 |
| 55-64 | 1 | 8 | 0 | 0 | 2 | 16 |
| 65+ | 0 | 0 | 2 | 16 | 1 | 8 |
| UNKNOWN | 1 | 8 | 0 | 0 | 0 | 0 |
| TOTAL | 3 | 24 | 6 | 48 | 15 | 120 |

---

* THE ESTIMATES WERE DEVELOPED FROM A RATIO OF THE TOTAL U.S. HOSPITAL ADMISSIONS TO TOTAL SAMPLE HOSPITAL ADMISSIONS, RATHER THAN FROM REGIONAL HOSPITAL ADMISSIONS, TO SAMPLE HOSPITAL ADMISSIONS WITHIN THE INDIVIDUAL REGIONS. THUS, THE TOTAL ESTIMATED NUMBER IN TABLE 101 WILL VARY SLIGHTLY FROM THE SUM OF THE REGIONAL TOTALS IN TABLES 102-104.

### TABLE 101 (CONTINUED)

OBSERVED AND ESTIMATED NUMBERS OF HOSPITAL ADMITTED PESTICIDE POISONING DEATHS BY AGE GROUP AND CAUSE OF EXPOSURE IN THE UNITED STATES FOR 1971, 1972, AND 1973.*

| | UNKNOWN | | TOTAL | |
|---|---|---|---|---|
| AGE | OBSERVED | ESTIMATED | OBSERVED | ESTIMATED |
| 0-4 | 0 | 0 | 1 | 8 |
| 5-9 | 0 | 0 | 1 | 8 |
| 10-14 | 0 | 0 | 0 | 0 |
| 15-19 | 0 | 0 | 4 | 32 |
| 20-24 | 0 | 0 | 2 | 16 |
| 25-34 | 0 | 0 | 5 | 40 |
| 35-44 | 0 | 0 | 2 | 16 |
| 45-54 | 0 | 0 | 2 | 16 |
| 55-64 | 0 | 0 | 3 | 24 |
| 65+ | 0 | 0 | 3 | 24 |
| UNKNOWN | 1 | 8 | 2 | 16 |
| TOTAL | 1 | 8 | 25 | 200 |

---

*THE ESTIMATES WERE DEVELOPED FROM A RATIO OF THE TOTAL U.S. HOSPITAL ADMISSIONS TO TOTAL SAMPLE HOSPITAL ADMISSIONS, RATHER THAN FROM REGIONAL HOSPITAL ADMISSIONS, TO SAMPLE HOSPITAL ADMISSIONS WITHIN THE INDIVIDUAL REGIONS. THUS, THE TOTAL ESTIMATED NUMBER IN TABLE 101 WILL VARY SLIGHTLY FROM THE SUM OF THE REGIONAL TOTALS IN TABLES 102-104

# TABLE 102

OBSERVED AND ESTIMATED NUMBERS OF HOSPITAL ADMITTED PESTICIDE POISONING DEATHS BY CAUSE OF EXPOSURE AND EPA REGION IN THE UNITED STATES FOR 1971.*

|  | OCCUPATIONAL |  | NON-OCCUPATIONAL |  | INTENTIONAL |  |
|---|---|---|---|---|---|---|
| REGIONS | OBSERVED | ESTIMATED | OBSERVED | ESTIMATED | OBSERVED | ESTIMATED |
| I | 0 | 0 | 0 | 0 | 0 | 0 |
| II | 0 | 0 | 0 | 0 | 0 | 0 |
| III | 0 | 0 | 0 | 0 | 0 | 0 |
| IV | 0 | 0 | 2 | 17 | 0 | 0 |
| V | 0 | 0 | 0 | 0 | 0 | 0 |
| VI | 1 | 8 | 1 | 8 | 1 | 8 |
| VII | 0 | 0 | 0 | 0 | 0 | 0 |
| VIII | 0 | 0 | 0 | 0 | 0 | 0 |
| IX | 0 | 0 | 0 | 0 | 1 | 8 |
| X | 0 | 0 | 0 | 0 | 0 | 0 |
| U.S. TOTAL | 1 | 8 | 3 | 25 | 2 | 16 |

---

*THE ESTIMATES WERE DEVELOPED FROM A SUM OF THE RATIO OF REGIONAL HOSPITAL ADMISSIONS TO THE SAMPLE REGIONAL HOSPITAL ADMISSIONS.

TABLE 102 (CONTINUED)

OBSERVED AND ESTIMATED NUMBERS OF HOSPITAL ADMITTED PESTICIDE POISONING DEATHS BY CAUSE OF EXPOSURE AND EPA REGION IN THE UNITED STATES FOR 1971.*

| REGIONS | UNKNOWN | | TOTAL | |
|---|---|---|---|---|
| | OBSERVED | ESTIMATED | OBSERVED | ESTIMATED |
| I | 0 | 0 | 0 | 0 |
| II | 0 | 0 | 0 | 0 |
| III | 0 | 0 | 0 | 0 |
| IV | 0 | 0 | 2 | 17 |
| V | 0 | 0 | 0 | 0 |
| VI | 0 | 0 | 3 | 24 |
| VII | 0 | 0 | 0 | 0 |
| VIII | 0 | 0 | 0 | 0 |
| IX | 0 | 0 | 1 | 8 |
| X | 0 | 0 | 0 | 0 |
| U.S. TOTAL | 0 | 0 | 6 | 49 |

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*THE ESTIMATES WERE DEVELOPED FROM A SUM OF THE RATIO OF REGIONAL ADMISSIONS TO THE SAMPLE REGIONAL HOSPITAL ADMISSIONS.

TABLE 103

OBSERVED AND ESTIMATED NUMBERS OF HOSPITAL ADMITTED PESTICIDE POISONING DEATHS BY CAUSE OF EXPOSURE AND EPA REGION IN THE UNITED STATES FOR 1972.*

| REGIONS | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| | OBSERVED | ESTIMATED | OBSERVED | ESTIMATED | OBSERVED | ESTIMATED |
| I | 0 | 0 | 0 | 0 | 0 | 0 |
| II | 0 | 0 | 0 | 0 | 0 | 0 |
| III | 0 | 0 | 0 | 0 | 0 | 0 |
| IV | 1 | 8 | 0 | 0 | 1 | 8 |
| V | 0 | 0 | 0 | 0 | 2 | 16 |
| VI | 0 | 0 | 2 | 16 | 0 | 0 |
| VII | 0 | 0 | 0 | 0 | 1 | 8 |
| VIII | 0 | 0 | 0 | 0 | 1 | 8 |
| IX | 0 | 0 | 0 | 0 | 3 | 20 |
| X | 0 | 0 | 0 | 0 | 0 | 0 |
| U.S. TOTAL | 1 | 8 | 2 | 16 | 8 | 60 |

*THE ESTIMATES WERE DEVELOPED FROM A SUM OF THE RATIO OF REGIONAL HOSPITAL ADMISSIONS TO THE SAMPLE REGIONAL HOSPITAL ADMISSIONS.

## TABLE 103 (CONTINUED)

OBSERVED AND ESTIMATED NUMBERS OF HOSPITAL ADMITTED PESTICIDE POISONING DEATHS BY CAUSE OF EXPOSURE AND EPA REGION IN THE UNITED STATES FOR 1972.*

|  | UNKNOWN |  | TOTAL |  |
|---|---|---|---|---|
| REGIONS | OBSERVED | ESTIMATED | OBSERVED | ESTIMATED |
| I | 0 | 0 | 0 | 0 |
| II | 0 | 0 | 0 | 0 |
| III | 0 | 0 | 0 | 0 |
| IV | 1 | 8 | 3 | 24 |
| V | 0 | 0 | 2 | 16 |
| VI | 0 | 0 | 2 | 16 |
| VII | 0 | 0 | 1 | 8 |
| VIII | 0 | 0 | 1 | 8 |
| IX | 0 | 0 | 3 | 20 |
| X | 0 | 0 | 0 | 0 |
| U.S. TOTAL | 1 | 8 | 12 | 92 |

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*THE ESTIMATES WERE DEVELOPED FROM A SUM OF THE RATIO OF REGIONAL ADMISSIONS TO THE SAMPLE REGIONAL HOSPITAL ADMISSIONS.

## TABLE 104

OBSERVED AND ESTIMATED NUMBERS OF HOSPITAL ADMITTED PESTICIDE POISONING DEATHS BY CAUSE OF EXPOSURE AND EPA REGION IN THE UNITED STATES FOR 1973.*

| REGIONS | OCCUPATIONAL | | NON-OCCUPATIONAL | | INTENTIONAL | |
|---|---|---|---|---|---|---|
| | OBSERVED | ESTIMATED | OBSERVED | ESTIMATED | OBSERVED | ESTIMATED |
| I | 0 | 0 | 0 | 0 | 0 | 0 |
| II | 0 | 0 | 0 | 0 | 0 | 0 |
| III | 0 | 0 | 0 | 0 | 2 | 16 |
| IV | 0 | 0 | 0 | 0 | 0 | 0 |
| V | 0 | 0 | 1 | 8 | 0 | 0 |
| VI | 1 | 8 | 0 | 0 | 1 | 8 |
| VII | 0 | 0 | 0 | 0 | 0 | 0 |
| VIII | 0 | 0 | 0 | 0 | 0 | 0 |
| IX | 0 | 0 | 0 | 0 | 2 | 14 |
| X | 0 | 0 | 0 | 0 | 0 | 0 |
| U.S. TOTAL | 1 | 8 | 1 | 8 | 5 | 38 |

*THE ESTIMATES WERE DEVELOPED FROM A SUM OF THE RATIO OF REGIONAL HOSPITAL ADMISSIONS TO THE SAMPLE REGIONAL HOSPITAL ADMISSIONS.

TABLE 104 (CONTINUED)

OBSERVED AND ESTIMATED NUMBERS OF HOSPITAL ADMITTED PESTICIDE POISONING DEATHS BY CAUSE OF EXPOSURE AND EPA REGION IN THE UNITED STATES FOR 1973.*

| | UNKNOWN | | TOTAL | |
|---|---|---|---|---|
| REGIONS | OBSERVED | ESTIMATED | OBSERVED | ESTIMATED |
| I | 0 | 0 | 0 | 0 |
| II | 0 | 0 | 0 | 0 |
| III | 0 | 0 | 2 | 16 |
| IV | 0 | 0 | 0 | 0 |
| V | 0 | 0 | 1 | 8 |
| VI | 0 | 0 | 2 | 16 |
| VII | 0 | 0 | 0 | 0 |
| VIII | 0 | 0 | 0 | 0 |
| IX | 0 | 0 | 2 | 14 |
| X | 0 | 0 | 0 | 0 |
| U.S. TOTAL | 0 | 0 | 7 | 54 |

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*THE ESTIMATES WERE DEVELOPED FROM A SUM OF THE RATIO OF REGIONAL ADMISSIONS TO THE SAMPLE REGIONAL HOSPITAL ADMISSIONS.

# SUMMARY

## CHAPTER V

Previous studies of pesticide poisonings in the United States were largely confined to individual States or at best a few States. Most examined mortality but rarely considered morbidity. The present study by the U. S. Environmental Protection Agency (EPA) marks a significant departure from this tradition: it is nationwide, and it considers morbidity as well as mortality.

Selecting a stratified random sample of the Nation's 7000 general-care hospitals, the Human Effects Monitoring Branch employed a statistically reliable method for assessing the seriousness of pesticide poisonings in 1971-73. Authors of The National Hospital Study used the procedure described in Chapter III to estimate the number of pesticide poisonings admitted to general-care hospitals and the incidence rates per 100,000 hospital admissions in the Nation, EPA regions, and each of the fifty states plus the District of Columbia. Mortality rates were also developed for the United States and for the EPA regions.

Nationally, the estimated numbers of hospital-admitted pesticide poisonings in 1971, 1972, and 1973 were 2,596, 2,821, and 2,831, respectively. The three-year total (1971-73) was estimated to be 8,248 hospital-admitted pesticide poisonings.

Nationwide incidence rates ranged from 8.2 cases per 100,000 hospital admissions in 1971 to 8.5 in 1973. For 1973, the standard deviation of the incidence rate of 8.5 per 100,000 hospital admissions was 0.67; thus with greater than 95 percent confidence the incidence rate of pesticide poisonings due to all causes is between 7.8, and 9.2 cases per 100,000 admissions.

Since all rates expressed in terms of 100,000 admissions change by less than 1.4 cases each year, it is doubtful that the rates differ significantly from year to year.

Data clearly show that EPA Regions I, V, VII, and X witnessed increases in the estimated numbers of pesticide poisonings and in the incidence rates per 100,000 hospital admissions for such poisonings in 1971-73. Regions IV, VI, and IX consistently maintained incidence rates greater than the average rate for the ten regions. Regions I, II, V, VIII, and X had higher incidence rates in 1973 than in 1971.

Nationally, the estimated numbers of pesticide poisonings admitted to general-care hospitals as a result of occupational exposure increased from 811 in 1971 to 855 in 1973. Nonoccupational hospital-admitted pesticide poisonings increased from 1,295 in 1971 to 1,446 in 1973; this omits intentional poisonings. Incidence rates for pesticide poisonings per 100,000 hospital admissions in the occupationally exposed was estimated to be 2.5 in 1971, and remained at that figure in 1973. Region IV led all regions in the estimated numbers of occupationally related pesticide poisonings in 1971, 1972, and 1973; respective totals were 332, 225, and 296. Region VI had estimated incidence rates of 6.6, 3.8 and 5.8 cases per 100,000 hospital admissions in 1971, 1972, and 1973, respectively, leading all regions. It is significant that during the three-year period only an estimated 28 percent (2,295)of all pesticide poisonings admitted to hospitals were occupationally related; of this group, farmers and agricultrual workers had the greatest percentage of poisonings: 36 percent (817).

Organophosphates were the most common cause of occupationally related hosptial-admitted pesticide poisonings in 1971-73. Organophosphates were responsible for 68 percent (1,570) of the poisonings; chlorinated hydrocarbons were responsible for only 14 percent (321) during that period.

Regions IV and VI had a large majority of the Nations occupationally related pesticide poisonings admitted to hospitals in 1971-73. In 1971 the two regions had 77 percent of the Nation's occupationally related organophosphate poisonigs, 59 percent of the chlorinated hydrocarbon poisonings, 59 percent of the carbamate poisonings; and 100 percent of the arsenicals. Corresponding percentages for Regions IV and VI in 1972 were: organophosphates, 58 percent; chlorinated hydrocarbons, 70 percent; carbamates, 41 percent; and arsenicals, 100 percent. In 1973, the same regions had 61 percent of the Nation's occupationally related organophosphate poisonings, 78 percent of the chlorinated hydrocarbon poisonings, and 74 percent of the carbamate poisonings.

The data clearly show organophosphates are responsible for the greatest share of the occupationally exposed pesticide poisonings; it is equally clear that the percentage of involvement decreased from 1971 to 1973.

Nationally the estimated numbers of hospital-admitted pesticide poisonings in 1971, 1972, and 1973 among children 0-4 years were 995, 1,231, and 1,001, respectively. Incidence rates per 100,000 hospital admissions ranged from 3.0 in 1971 to 3.1 in 1973. Region V, with 284 estimated hospital-admitted poisonings in children 0-4 years, and Region IX, with an incidence rate of 5.9, were high among the regions in 1971. California, with 198 estimated hospital-admitted pesticide poisonings, and Delaware, with an incidence rate of 36.5 were the highest among the States in 1971.

Region V had 309 estimated hospital-admitted pesticide poisonings among children 0-4 years in 1972, and Regions III and IX had an estimated incidence rate of 5.4; these were high among the regions. California, with an estimated 172 hospital-admitted pesticide poisonings, and the District of Columbia, with an incidence rate of 66.1, were the highest among the States in 1972.

Region V had 286 estimated hospital-admitted pesticide poisonings among children 0-4 years in 1973 and Region IX had an incidence rate of 7.3; these were high among the regions. California, with an estimated 238 hospital-admitted pesticide poisonings, and the District of Columbia, with an incidence rate of 16.5 were highest among the States that year.

Because few deaths were associated with pesticide poisonings in 1971-73, all observed deaths for the period have been grouped in order to estimate statistically the magnitude of the problem throughout the Nation's general-care hospitals. The estimated numbers of occupationally related hospital-admitted pesticide poisoning deaths account for only 12 percent (24) of the total (195) in 1971-73, but the estimated number of intentional deaths make up more than 58 percent (114) of the hospital-admitted pesticide poisoning deaths for the three-year period. Children less than ten years of age comprised an estimated 8 percent (16) of the total pesticide-related deaths. Only in Regions IV and VI did hospital-admitted persons die of occupationally related pesticide poisonings.

As mentioned earlier, the National Hospital Study includes pesticide poisonings only of those individuals who received hospitalization for the poisonings. This excludes several categories: poisonings treated in physicians offices instead of hospitals, emergency-room cases which did no require not require hospitalization, and pesticide poisonings not receiving medical treatment of any nature.

Hayes and Pirkle have noted that physicians sometimes attribute pesticide illnesses and deaths to other causes (5). However, investigators in the present study believe that the majority of poisonings attributed to pesticides were correctly diagnosed due to hospital records of patients' exposure, consistent clincial management and occasionally, laboratory findings.

# LITERATURE CITED

1. Anderson, M.L., L.A. Fiedler, and W. Williams. 1971, Proceedings of the training course: Pesticides and Public Health (Advanced). U.S. Environmental Protection Agency, Pesticide Office, Division of Pesticide Community Studies. Chamblee, Georgia.

2. Hayes, Wayland J. 1964. Epidemiology of Pesticide Proceedings of Short Course in Occupational Health Aspects of Pesticides. University of Oklahoma. Norman, Oklahoma.

3. Hayes, W.J., Jr. 1964. Toxicological problems associated with use of pesticides. Ind. and Trop. Hlth: V: 118-132.

4. Davis, J.H. Clinical, epidemiological and forensic aspects of pesticide poisonings. Monograph.

5. Hayes, W.J., and C.I. Pirkle. 1966. Mortality from pesticides in 1961. Arch. Environ. Health. 12:43-55.

6. Hayes, W.J., 1964. Toxicology of insecticides. Agr. Chem. 19(3): 20-22, 139-140.

7. California Dept. of Publ. Health. 1970. Occupational disease in California attributed to pesticides and other agricultural chemicals. Bureau of Occupational Health and Environmental Epidemiology.

8. Morgan, D.P. and C.C. Roan, Arizona Community Pesticides Studies Project, 1970.

9. Colorado Community Study on Pesticides, 1971.

10. Reich, G.A., G. L. Gallaher, and J. S. Wiseman. 1968. Characteristics of pesticide poisoning in south Texas. Texas Medicine. 64(9):56-58.

11. American Hospital Association. 1973. AHA guide to the health care field. Chicago, Ill.

12. Cochran, William G. 1963. Sampling techniques. John Wiley & Sons. New York. Second Edition.

13. Stein, C. 1945. A two-sample test for a linear hypothesis whose power is independent of the variance. Annals Math. Stat. 16:243-258.

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## TABLE A-1

NUMBER OF OBSERVED CASES OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1971, 1972, AND 1973.

| YEARS | CASES |
|---|---|
| 1971 | 336 |
| 1972 | 368 |
| 1973 | 368 |
| TOTAL | 1072 |

## TABLE B-1

NUMBER OF OBSERVED CASES OF HOSPITAL ADMITTED PESTICIDE POISONINGS BY REGION, 1971, 1972, AND 1973.

| | CASES | | |
|---|---|---|---|
| REGION | 1971 | 1972 | 1973 |
| I | 5 | 5 | 9 |
| II | 5 | 10 | 9 |
| III | 24 | 40 | 26 |
| IV | 78 | 85 | 72 |
| V | 50 | 57 | 59 |
| VI | 54 | 49 | 57 |
| VII | 14 | 18 | 26 |
| VIII | 6 | 9 | 9 |
| IX | 89 | 83 | 81 |
| X | 11 | 12 | 20 |
| TOTAL | 336 | 368 | 368 |

## TABLE C-1

## NUMBER OF OBSERVED CASES OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1971, 1972, AND 1973

| | CASES | | |
|---|---|---|---|
| REGION I | 1971 | 1972 | 1973 |
| MAINE | 0 | 2 | 4 |
| NEW HAMPSHIRE | 0 | 0 | 0 |
| VERMONT | 0 | 0 | 0 |
| MASSACHUSETTS | 2 | 3 | 3 |
| RHODE ISLAND | 0 | 0 | 0 |
| CONNECTICUT | 3 | 0 | 2 |

## TABLE C-2

NUMBER OF OBSERVED CASES OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1971, 1972, AND 1973.

|  |  | CASES |  |
|---|---|---|---|
| REGION II | 1971 | 1972 | 1973 |
| NEW YORK | 3 | 3 | 4 |
| NEW JERSEY | 2 | 7 | 5 |

## TABLE C-3

NUMBER OF OBSERVED CASES OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1971, 1972, AND 1973.

| | CASES | | |
|---|---|---|---|
| REGION III | 1971 | 1972 | 1973 |
| PENNSYLVANIA | 9 | 9 | 11 |
| DELAWARE | 3 | 3 | 1 |
| MARYLAND | 4 | 8 | 5 |
| DISTRICT OF COLUMBIA | 4 | 14 | 5 |
| VIRGINIA | 2 | 2 | 4 |
| WEST VIRGINIA | 2 | 4 | 0 |

## TABLE C-4

NUMBER OF OBSERVED CASES OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1971, 1972, AND 1973.

| REGION IV | CASES | | |
|---|---|---|---|
| | 1971 | 1972 | 1973 |
| NORTH CAROLINA | 15 | 14 | 13 |
| SOUTH CAROLINA | 2 | 3 | 5 |
| GEORGIA | 18 | 18 | 17 |
| FLORIDA | 24 | 9 | 14 |
| KENTUCKY | 6 | 15 | 4 |
| TENNESSEE | 6 | 13 | 11 |
| ALABAMA | 5 | 8 | 7 |
| MISSISSIPPI | 2 | 5 | 1 |

## TABLE C-5

NUMBER OF OBSERVED CASES OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1971, 1972, AND 1973.

| | CASES | | |
|---|---|---|---|
| REGION V | 1971 | 1972 | 1973 |
| OHIO | 6 | 9 | 11 |
| INDIANA | 1 | 2 | 4 |
| ILLINOIS | 21 | 26 | 27 |
| MICHIGAN | 10 | 8 | 5 |
| WISCONSIN | 5 | 6 | 6 |
| MINNESOTA | 7 | 6 | 6 |

## TABLE C-6

NUMBER OF OBSERVED CASES OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1971, 1972, AND 1973.

| | | CASES | |
|---|---|---|---|
| REGION VI | 1971 | 1972 | 1973 |
| ARKANSAS | 1 | 4 | 0 |
| LOUISIANA | 4 | 5 | 6 |
| OKLAHOMA | 4 | 3 | 4 |
| TEXAS | 43 | 33 | 46 |
| NEW MEXICO | 2 | 4 | 1 |

TABLE C-7

NUMBER OF OBSERVED CASES OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1971, 1972, AND 1973.

| REGION VII | 1971 | CASES<br>1972 | 1973 |
|---|---|---|---|
| IOWA | 3 | 6 | 6 |
| MISSOURI | 6 | 3 | 6 |
| NEBRASKA | 1 | 2 | 5 |
| KANSAS | 4 | 7 | 9 |

## TABLE C-8

NUMBER OF OBSERVED CASES OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1971, 1972, AND 1973.

| | CASES | | |
|---|---|---|---|
| REGION VIII | 1971 | 1972 | 1973 |
| NORTH DAKOTA | 1 | 2 | 2 |
| SOUTH DAKOTA | 0 | 1 | 2 |
| MONTANA | 1 | 0 | 0 |
| WYOMING | 0 | 0 | 0 |
| COLORADO | 2 | 3 | 4 |
| UTAH | 2 | 3 | 1 |

## TABLE C-9

NUMBER OF OBSERVED CASES OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1971, 1972, AND 1973.

|  |  | CASES |  |
|---|---|---|---|
| REGION IX | 1971 | 1972 | 1973 |
| CALIFORNIA | 77 | 69 | 71 |
| ARIZONA | 8 | 13 | 8 |
| NEVADA | 0 | 0 | 0 |
| HAWAII | 4 | 1 | 2 |

## TABLE C-10

NUMBER OF OBSERVED CASES OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1971, 1972, AND 1973.

| REGION X | | CASES | |
|---|---|---|---|
| | 1971 | 1972 | 1973 |
| IDAHO | 2 | 2 | 6 |
| WASHINGTON | 5 | 3 | 7 |
| OREGON | 4 | 7 | 7 |
| ALASKA | 0 | 0 | 0 |

## TABLE D-1

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS BY CAUSE OF EXPOSURE AND REGION, 1971, 1972, AND 1973.

| | OCCUPATIONAL | | | NON-OCCUPATIONAL | | | INTENTIONAL | | | UNCLASSIFIED |
|---|---|---|---|---|---|---|---|---|---|---|
| REGION | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | |
| I | 1 | 0 | 4 | 3 | 4 | 4 | 1 | 1 | 1 | 0 |
| II | 0 | 0 | 3 | 3 | 8 | 6 | 2 | 2 | 0 | 0 |
| III | 1 | 3 | 2 | 20 | 31 | 17 | 1 | 4 | 7 | 4 |
| IV | 44 | 31 | 40 | 28 | 40 | 19 | 6 | 10 | 13 | 4 |
| V | 4 | 4 | 6 | 39 | 47 | 47 | 7 | 6 | 6 | 0 |
| VI | 28 | 17 | 27 | 19 | 29 | 17 | 7 | 3 | 12 | 1 |
| VII | 4 | 5 | 4 | 8 | 11 | 17 | 2 | 2 | 5 | 0 |
| VIII | 3 | 3 | 4 | 2 | 5 | 4 | 1 | 1 | 1 | 0 |
| IX | 11 | 15 | 12 | 39 | 38 | 47 | 39 | 29 | 22 | 1 |
| X | 4 | 3 | 6 | 4 | 8 | 11 | 3 | 1 | 2 | 1 |
| TOTAL | 100 | 81 | 108 | 165 | 221 | 189 | 69 | 59 | 69 | 11 |

## TABLE E-1

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS BY CAUSE OF EXPOSURE, EPA REGION I AND STATES, 1971, 1972 AND 1973.

| | OCCUPATIONAL | | | NON-OCCUPATIONAL | | | INTENTIONAL | | | UNCLASSIFIED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REGION & STATE | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 |
| REGION I | 1 | 0 | 4 | 3 | 4 | 4 | 1 | 1 | 1 | 0 | 0 | 0 |
| MAINE | 0 | 0 | 3 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| NEW HAMPSHIRE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VERMONT | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MASSACHUSETTS | 1 | 0 | 0 | 1 | 2 | 2 | 0 | 1 | 1 | 0 | 0 | 0 |
| RHODE ISLAND | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONNECTICUT | 0 | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |

### TABLE E-2

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS BY CAUSE OF EXPOSURE, EPA REGION II AND STATES, 1971, 1972 AND 1973.

| | OCCUPATIONAL | | | NON-OCCUPATIONAL | | | INTENTIONAL | | | UNCLASSIFIED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REGION & STATE | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 |
| REGION II | 0 | 0 | 3 | 3 | 8 | 6 | 2 | 2 | 0 | 0 | 0 | 0 |
| NEW YORK | 0 | 0 | 0 | 2 | 2 | 4 | 1 | 1 | 0 | 0 | 0 | 0 |
| NEW JERSEY | 0 | 0 | 3 | 1 | 6 | 2 | 1 | 1 | 0 | 0 | 0 | 0 |

TABLE E-3

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS BY CAUSE OF EXPOSURE, EPA REGION III AND STATES, 1971, 1972 AND 1973.

| | OCCUPATIONAL | | | NON-OCCUPATIONAL | | | INTENTIONAL | | | UNCLASSIFIED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REGION & STATE | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 |
| REGION III | 1 | 3 | 2 | 20 | 31 | 17 | 1 | 4 | 7 | 2 | 2 | 0 |
| PENNSYLVANIA | 0 | 0 | 0 | 8 | 9 | 9 | 1 | 0 | 2 | 0 | 0 | 0 |
| DELAWARE | 1 | 3 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| MARYLAND | 0 | 0 | 0 | 2 | 4 | 3 | 0 | 2 | 2 | 2 | 2 | 0 |
| DISTRICT OF CO | 0 | 0 | 0 | 4 | 12 | 4 | 0 | 2 | 1 | 0 | 0 | 0 |
| VIRGINIA | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| WEST VIRGINIA | 0 | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TABLE E-4

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS BY CAUSE OF EXPOSURE, EPA REGION IV AND STATES, 1971, 1972 AND 1973.

| | OCCUPATIONAL | | | NON-OCCUPATIONAL | | | INTENTIONAL | | | UNCLASSIFIED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REGION & STATE | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 |
| REGION IV | 44 | 31 | 40 | 28 | 40 | 19 | 6 | 10 | 13 | 0 | 4 | 0 |
| NORTH CAROLINA | 9 | 2 | 10 | 4 | 8 | 3 | 2 | 0 | 0 | 0 | 4 | 0 |
| SOUTH CAROLINA | 2 | 1 | 2 | 0 | 2 | 2 | 0 | 0 | 1 | 0 | 0 | 0 |
| GEORGIA | 12 | 14 | 16 | 5 | 3 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| FLORIDA | 16 | 7 | 8 | 7 | 2 | 4 | 1 | 0 | 2 | 0 | 0 | 0 |
| KENTUCKY | 1 | 4 | 1 | 4 | 8 | 2 | 1 | 3 | 1 | 0 | 0 | 0 |
| TENNESSEE | 2 | 2 | 1 | 3 | 7 | 4 | 1 | 4 | 6 | 0 | 0 | 0 |
| ALABAMA | 2 | 1 | 2 | 3 | 5 | 4 | 0 | 2 | 1 | 0 | 0 | 0 |
| MISSISSIPPI | 0 | 0 | 0 | 2 | 5 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |

## TABLE E-5

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS BY CAUSE OF EXPOSURE, EPA REGION V AND STATES, 1971, 1972 AND 1973.

| | OCCUPATIONAL | | | NON-OCCUPATIONAL | | | INTENTIONAL | | | UNCLASSIFIED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REGION & STATE | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 |
| REGION V | 4 | 4 | 6 | 39 | 47 | 47 | 7 | 6 | 6 | 0 | 0 | 0 |
| OHIO | 0 | 0 | 0 | 5 | 7 | 9 | 1 | 2 | 2 | 0 | 0 | 0 |
| INDIANA | 0 | 0 | 1 | 1 | 1 | 3 | 0 | 1 | 0 | 0 | 0 | 0 |
| ILLINOIS | 3 | 3 | 4 | 14 | 22 | 22 | 4 | 1 | 1 | 0 | 0 | 0 |
| MICHIGAN | 1 | 0 | 1 | 8 | 7 | 4 | 1 | 1 | 0 | 0 | 0 | 0 |
| WISCONSIN | 0 | 0 | 0 | 4 | 5 | 6 | 1 | 1 | 0 | 0 | 0 | 0 |
| MINNESOTA | 0 | 1 | 0 | 7 | 5 | 3 | 0 | 0 | 3 | 0 | 0 | 0 |

## TABLE E-6

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS BY CAUSE OF EXPOSURE, EPA REGION VI AND STATES, 1971, 1972 AND 1973.

| | OCCUPATIONAL | | | NON-OCCUPATIONAL | | | INTENTIONAL | | | UNCLASSIFIED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REGION & STATE | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 |
| REGION VI | 28 | 17 | 27 | 19 | 29 | 17 | 7 | 3 | 12 | 0 | 0 | 1 |
| ARKANSAS | 0 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LOUISIANA | 1 | 2 | 3 | 3 | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 |
| OKLAHOMA | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 0 | 0 |
| TEXAS | 24 | 12 | 21 | 13 | 19 | 16 | 6 | 2 | 8 | 0 | 0 | 1 |
| NEW MEXICO | 1 | 2 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |

## TABLE E-7

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS BY CAUSE OF EXPOSURE, EPA REGION VII AND STATES, 1971, 1972 AND 1973.

| | OCCUPATIONAL | | | NON-OCCUPATIONAL | | | INTENTIONAL | | | UNCLASSIFIED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REGION & STATE | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 |
| REGION VII | 4 | 5 | 4 | 8 | 11 | 17 | 2 | 2 | 5 | 0 | 0 | 0 |
| IOWA | 0 | 2 | 0 | 2 | 3 | 5 | 1 | 1 | 1 | 0 | 0 | 0 |
| MISSOURI | 4 | 0 | 2 | 1 | 3 | 2 | 1 | 0 | 2 | 0 | 0 | 0 |
| NEBRASKA | 0 | 1 | 1 | 1 | 1 | 3 | 0 | 0 | 1 | 0 | 0 | 0 |
| KANSAS | 0 | 2 | 1 | 4 | 4 | 7 | 0 | 1 | 1 | 0 | 0 | 0 |

## TABLE E-8

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS BY CAUSE OF EXPOSURE, EPA REGION VIII AND STATES, 1971, 1972 AND 1973.

| | OCCUPATIONAL | | | NON-OCCUPATIONAL | | | INTENTIONAL | | | UNCLASSIFIED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REGION & STATE | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 |
| REGION VIII | 3 | 3 | 4 | 2 | 5 | 4 | 1 | 1 | 1 | 0 | 0 | 0 |
| NORTH DAKOTA | 1 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SOUTH DAKOTA | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| MONTANA | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WYOMING | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| COLORADO | 1 | 1 | 0 | 1 | 1 | 3 | 0 | 1 | 1 | 0 | 0 | 0 |
| UTAH | 0 | 1 | 1 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |

TABLE E-9

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS BY CAUSE OF EXPOSURE, EPA REGION IX AND STATES, 1971, 1972 AND 1973.

| | OCCUPATIONAL | | | NON-OCCUPATIONAL | | | INTENTIONAL | | | UNCLASSIFIED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REGION & STATE | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 |
| REGION IX | 11 | 15 | 12 | 39 | 38 | 47 | 39 | 29 | 22 | 0 | 1 | 0 |
| CALIFORNIA | 4 | 7 | 6 | 37 | 35 | 43 | 36 | 27 | 22 | 0 | 0 | 0 |
| ARIZONA | 7 | 8 | 5 | 1 | 3 | 3 | 0 | 1 | 0 | 0 | 1 | 0 |
| NEVADA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HAWAII | 0 | 0 | 1 | 1 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 0 |

## TABLE E-10

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS BY CAUSE OF EXPOSURE, EPA REGION X AND STATES, 1971, 1972 AND 1973.

| | OCCUPATIONAL | | | NON-OCCUPATIONAL | | | INTENTIONAL | | | UNCLASSIFIED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REGION & STATE | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 | 1971 | 1972 | 1973 |
| REGION X | 4 | 3 | 6 | 4 | 8 | 11 | 3 | 1 | 2 | 0 | 0 | 1 |
| IDAHO | 2 | 2 | 4 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| WASHINGTON | 2 | 0 | 1 | 2 | 3 | 5 | 1 | 0 | 1 | 0 | 0 | 0 |
| OREGON | 0 | 1 | 1 | 2 | 5 | 4 | 2 | 1 | 1 | 0 | 0 | 1 |
| ALASKA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## TABLE F-1

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS, BY SELECTED OCCUPATION, AND EPA REGION IN THE UNITED STATES 1971.

| REGION | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMER | AGRICULTURAL WORKER |
|---|---|---|---|---|
| I | 0 | 0 | 0 | 1 |
| II | 0 | 0 | 0 | 0 |
| III | 0 | 0 | 1 | 0 |
| IV | 7 | 7 | 12 | 6 |
| V | 2 | 0 | 0 | 0 |
| VI | 1 | 3 | 2 | 3 |
| VII | 0 | 0 | 0 | 0 |
| VIII | 0 | 1 | 1 | 0 |
| IX | 2 | 8 | 0 | 0 |
| X | 1 | 2 | 0 | 1 |
| TOTAL | 13 | 21 | 16 | 11 |

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## TABLE F-1 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS, BY SELECTED OCCUPATION, AND EPA REGION IN THE UNITED STATES 1971.

| REGION | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN OR NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| I | 0 | 0 | 0 | 1 |
| II | 0 | 0 | 0 | 0 |
| III | 0 | 0 | 0 | 1 |
| IV | 7 | 2 | 3 | 44 |
| V | 1 | 0 | 1 | 4 |
| VI | 17 | 0 | 2 | 28 |
| VII | 2 | 0 | 2 | 4 |
| VIII | 0 | 0 | 1 | 3 |
| IX | 0 | 0 | 1 | 11 |
| X | 0 | 0 | 0 | 4 |
| TOTAL | 27 | 2 | 10 | 100 |

## TABLE G-1

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

|  | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMERS | AGRICULTURAL WORKER |
|---|---|---|---|---|
|  | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION I | 0 | 0 | 0 | 1 |
| MAINE | 0 | 0 | 0 | 0 |
| NEW HAMPSHIRE | 0 | 0 | 0 | 0 |
| VERMONT | 0 | 0 | 0 | 0 |
| MASSACHUSETTS | 0 | 0 | 0 | 1 |
| RHODE ISLAND | 0 | 0 | 0 | 0 |
| CONNECTICUT | 0 | 0 | 0 | 0 |

## TABLE G-1 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION I | 0 | 0 | 0 | 1 |
| MAINE | 0 | 0 | 0 | 0 |
| NEW HAMPSHIRE | 0 | 0 | 0 | 0 |
| VERMONT | 0 | 0 | 0 | 0 |
| MASSACHUSETTS | 0 | 0 | 0 | 1 |
| RHODE ISLAND | 0 | 0 | 0 | 0 |
| CONNECTICUT | 0 | 0 | 0 | 0 |

TABLE G-2

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMERS | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION II | 0 | 0 | 0 | 0 |
| NEW YORK | 0 | 0 | 0 | 0 |
| NEW JERSEY | 0 | 0 | 0 | 0 |

## TABLE G-2 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION II | 0 | 0 | 0 | 0 |
| NEW YORK | 0 | 0 | 0 | 0 |
| NEW JERSEY | 0 | 0 | 0 | 0 |

## TABLE G-3

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMERS | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION III | 0 | 0 | 1 | 0 |
| PENNSYLVANIA | 0 | 0 | 0 | 0 |
| DELAWARE | 0 | 0 | 1 | 0 |
| MARYLAND | 0 | 0 | 0 | 0 |
| DISTRICT OF COLUMBIA | 0 | 0 | 0 | 0 |
| VIRGINIA | 0 | 0 | 0 | 0 |
| WEST VIRGINIA | 0 | 0 | 0 | 0 |

## TABLE G-3 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION III | 0 | 0 | 0 | 1 |
| PENNSYLVANIA | 0 | 0 | 0 | 0 |
| DELAWARE | 0 | 0 | 0 | 1 |
| MARYLAND | 0 | 0 | 0 | 0 |
| DISTRICT OF COLUMBIA | 0 | 0 | 0 | 0 |
| VIRGINIA | 0 | 0 | 0 | 0 |
| WEST VIRGINIA | 0 | 0 | 0 | 0 |

## TABLE G-4

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMERS | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION IV | 7 | 7 | 12 | 6 |
| NORTH CAROLINA | 0 | 1 | 5 | 1 |
| SOUTH CAROLINA | 0 | 0 | 1 | 0 |
| GEORGIA | 4 | 1 | 4 | 0 |
| FLORIDA | 2 | 4 | 1 | 5 |
| KENTUCKY | 0 | 0 | 0 | 0 |
| TENNESSEE | 1 | 0 | 0 | 0 |
| ALABAMA | 0 | 1 | 1 | 0 |
| MISSISSIPPI | 0 | 0 | 0 | 0 |

## TABLE G-4 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION IV | 7 | 2 | 3 | 44 |
| NORTH CAROLINA | 0 | 0 | 2 | 9 |
| SOUTH CAROLINA | 1 | 0 | 0 | 2 |
| GEORGIA | 1 | 2 | 0 | 12 |
| FLORIDA | 4 | 0 | 0 | 16 |
| KENTUCKY | 1 | 0 | 0 | 1 |
| TENNESSEE | 0 | 0 | 1 | 2 |
| ALABAMA | 0 | 0 | 0 | 2 |
| MISSISSIPPI | 0 | 0 | 0 | 0 |

## TABLE G-5

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMERS | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION V | 2 | 0 | 0 | 0 |
| OHIO | 0 | 0 | 0 | 0 |
| INDIANA | 0 | 0 | 0 | 0 |
| ILLINOIS | 2 | 0 | 0 | 0 |
| MICHIGAN | 0 | 0 | 0 | 0 |
| WISCONSIN | 0 | 0 | 0 | 0 |
| MINNESOTA | 0 | 0 | 0 | 0 |

### TABLE G-5 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION V | 1 | 0 | 1 | 4 |
| OHIO | 0 | 0 | 0 | 0 |
| INDIANA | 0 | 0 | 0 | 0 |
| ILLINOIS | 1 | 0 | 0 | 3 |
| MICHIGAN | 0 | 0 | 1 | 1 |
| WISCONSIN | 0 | 0 | 0 | 0 |
| MINNESOTA | 0 | 0 | 0 | 0 |

TABLE G-6

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMERS | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION VI | 1 | 3 | 2 | 3 |
| ARKANSAS | 0 | 0 | 0 | 0 |
| LOUISIANA | 0 | 0 | 0 | 1 |
| OKLAHOMA | 0 | 0 | 0 | 2 |
| TEXAS | 1 | 3 | 1 | 0 |
| NEW MEXICO | 0 | 0 | 1 | 0 |

## TABLE G-6 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION VI | 17 | 0 | 2 | 28 |
| ARKANSAS | 0 | 0 | 0 | 0 |
| LOUISIANA | 0 | 0 | 0 | 1 |
| OKLAHOMA | 0 | 0 | 0 | 2 |
| TEXAS | 17 | 0 | 2 | 24 |
| NEW MEXICO | 0 | 0 | 0 | 1 |

# TABLE G-7

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMERS | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION VII | 0 | 0 | 0 | 0 |
| IOWA | 0 | 0 | 0 | 0 |
| MISSOURI | 0 | 0 | 0 | 0 |
| NEBRASKA | 0 | 0 | 0 | 0 |
| KANSAS | 0 | 0 | 0 | 0 |

## TABLE G-7 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION VII | 2 | 0 | 2 | 4 |
| IOWA | 0 | 0 | 0 | 0 |
| MISSOURI | 2 | 0 | 2 | 4 |
| NEBRASKA | 0 | 0 | 0 | 0 |
| KANSAS | 0 | 0 | 0 | 0 |

## TABLE G-8

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMERS | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION VIII | 0 | 1 | 1 | 0 |
| NORTH DAKOTA | 0 | 1 | 0 | 0 |
| SOUTH DAKOTA | 0 | 0 | 0 | 0 |
| MONTANA | 0 | 0 | 1 | 0 |
| WYOMING | 0 | 0 | 0 | 0 |
| COLORADO | 0 | 0 | 0 | 0 |
| UTAH | 0 | 0 | 0 | 0 |

## TABLE G-8 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION VIII | 0 | 0 | 1 | 3 |
| NORTH DAKOTA | 0 | 0 | 0 | 1 |
| SOUTH DAKOTA | 0 | 0 | 0 | 0 |
| MONTANA | 0 | 0 | 0 | 1 |
| WYOMING | 0 | 0 | 0 | 0 |
| COLORADO | 0 | 0 | 1 | 1 |
| UTAH | 0 | 0 | 0 | 0 |

TABLE G-9

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMERS | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION IX | 2 | 8 | 0 | 0 |
| CALIFORNIA | 1 | 3 | 0 | 0 |
| ARIZONA | 1 | 5 | 0 | 0 |
| NEVADA | 0 | 0 | 0 | 0 |
| HAWAII | 0 | 0 | 0 | 0 |

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## TABLE G-9 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION IX | 0 | 0 | 1 | 11 |
| CALIFORNIA | 0 | 0 | 0 | 4 |
| ARIZONA | 0 | 0 | 1 | 7 |
| NEVADA | 0 | 0 | 0 | 0 |
| HAWAII | 0 | 0 | 0 | 0 |

## TABLE G-10

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMERS | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION X | 1 | 2 | 0 | 1 |
| IDAHO | 0 | 2 | 0 | 0 |
| WASHINGTON | 1 | 0 | 0 | 1 |
| OREGON | 0 | 0 | 0 | 0 |
| ALASKA | 0 | 0 | 0 | 0 |

## TABLE G-10 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1971.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION X | 0 | 0 | 0 | 4 |
| IDAHO | 0 | 0 | 0 | 2 |
| WASHINGTON | 0 | 0 | 0 | 2 |
| OREGON | 0 | 0 | 0 | 0 |
| ALASKA | 0 | 0 | 0 | 0 |

TABLE H-1

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS, BY SELECTED OCCUPATION, AND EPA REGION IN THE UNITED STATES 1972.

| REGION | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMER | AGRICULTURAL WORKER |
|---|---|---|---|---|
| I | 0 | 0 | 0 | 0 |
| II | 0 | 0 | 0 | 0 |
| III | 0 | 0 | 3 | 0 |
| IV | 9 | 3 | 10 | 7 |
| V | 2 | 0 | 1 | 0 |
| VI | 1 | 7 | 3 | 2 |
| VII | 0 | 0 | 3 | 1 |
| VIII | 0 | 1 | 0 | 2 |
| IX | 6 | 8 | 0 | 1 |
| X | 0 | 0 | 1 | 0 |
| TOTAL | 18 | 19 | 21 | 13 |

TABLE H-1 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS, BY SELECTED OCCUPATION, AND EPA REGION IN THE UNITED STATES 1972.

| REGION | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN OR NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| I | 0 | 0 | 0 | 0 |
| II | 0 | 0 | 0 | 0 |
| III | 0 | 0 | 0 | 3 |
| IV | 0 | 0 | 2 | 31 |
| V | 0 | 0 | 1 | 4 |
| VI | 2 | 0 | 2 | 17 |
| VII | 0 | 0 | 1 | 5 |
| VIII | 0 | 0 | 0 | 3 |
| IX | 0 | 0 | 0 | 15 |
| X | 0 | 1 | 1 | 3 |
| TOTAL | 2 | 1 | 7 | 81 |

### TABLE I-1

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGION AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMERS | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION I | 0 | 0 | 0 | 0 |
| MAINE | 0 | 0 | 0 | 0 |
| NEW HAMPSHIRE | 0 | 0 | 0 | 0 |
| VERMONT | 0 | 0 | 0 | 0 |
| MASSACHUSETTS | 0 | 0 | 0 | 0 |
| RHODE ISLAND | 0 | 0 | 0 | 0 |
| CONNECTICUT | 0 | 0 | 0 | 0 |

TABLE I-1 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION I | 0 | 0 | 0 | 0 |
| MAINE | 0 | 0 | 0 | 0 |
| NEW HAMPSHIRE | 0 | 0 | 0 | 0 |
| VERMONT | 0 | 0 | 0 | 0 |
| MASSACHUSETTS | 0 | 0 | 0 | 0 |
| RHODE ISLAND | 0 | 0 | 0 | 0 |
| CONNECTICUT | 0 | 0 | 0 | 0 |

### TABLE I-2

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMERS | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION II | 0 | 0 | 0 | 0 |
| NEW YORK | 0 | 0 | 0 | 0 |
| NEW JERSEY | 0 | 0 | 0 | 0 |

## TABLE I-2 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION II | 0 | 0 | 0 | 0 |
| NEW YORK | 0 | 0 | 0 | 0 |
| NEW JERSEY | 0 | 0 | 0 | 0 |

## TABLE I-3

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMERS | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION III | 0 | 0 | 3 | 0 |
| PENNSYLVANIA | 0 | 0 | 0 | 0 |
| DELAWARE | 0 | 0 | 3 | 0 |
| MARYLAND | 0 | 0 | 0 | 0 |
| DISTRICT OF COLUMBIA | 0 | 0 | 0 | 0 |
| VIRGINIA | 0 | 0 | 0 | 0 |
| WEST VIRGINIA | 0 | 0 | 0 | 0 |

TABLE I-3 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION III | 0 | 0 | 0 | 3 |
| PENNSYLVANIA | 0 | 0 | 0 | 0 |
| DELAWARE | 0 | 0 | 0 | 3 |
| MARYLAND | 0 | 0 | 0 | 0 |
| DISTRICT OF COLUMBIA | 0 | 0 | 0 | 0 |
| VIRGINIA | 0 | 0 | 0 | 0 |
| WEST VIRGINIA | 0 | 0 | 0 | 0 |

# TABLE I-4

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMERS | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION IV | 9 | 3 | 10 | 7 |
| NORTH CAROLINA | 0 | 0 | 0 | 0 |
| SOUTH CAROLINA | 0 | 1 | 0 | 0 |
| GEORGIA | 9 | 0 | 3 | 2 |
| FLORIDA | 0 | 2 | 0 | 5 |
| KENTUCKY | 0 | 0 | 4 | 0 |
| TENNESSEE | 0 | 0 | 2 | 0 |
| ALABAMA | 0 | 0 | 1 | 0 |
| MISSISSIPPI | 0 | 0 | 0 | 0 |

TABLE I-4 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION IV | 0 | 0 | 2 | 31 |
| NORTH CAROLINA | 0 | 0 | 2 | 2 |
| SOUTH CAROLINA | 0 | 0 | 0 | 1 |
| GEORGIA | 0 | C | 0 | 14 |
| FLORIDA | 0 | 0 | 0 | 7 |
| KENTUCKY | 0 | 0 | 0 | 4 |
| TENNESSEE | 0 | 0 | 0 | 2 |
| ALABAMA | 0 | 0 | 0 | 1 |
| MISSISSIPPI | 0 | 0 | 0 | 0 |

## TABLE I-5

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMERS | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION V | 2 | 0 | 1 | 0 |
| OHIO | 0 | 0 | 0 | 0 |
| INDIANA | 0 | 0 | 0 | 0 |
| ILLINOIS | 2 | 0 | 1 | 0 |
| MICHIGAN | 0 | 0 | 0 | 0 |
| WISCONSIN | 0 | 0 | 0 | 0 |
| MINNESOTA | 0 | 0 | 0 | 0 |

## TABLE I-5 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION V | 0 | 0 | 1 | 4 |
| OHIO | 0 | 0 | 0 | 0 |
| INDIANA | 0 | 0 | 0 | 0 |
| ILLINOIS | 0 | 0 | 0 | 3 |
| MICHIGAN | 0 | 0 | 0 | 0 |
| WISCONSIN | 0 | 0 | 0 | 0 |
| MINNESOTA | 0 | 0 | 1 | 1 |

TABLE I-6

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMERS | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION VI | 1 | 7 | 3 | 2 |
| ARKANSAS | 0 | 0 | 0 | 0 |
| LOUISIANA | 0 | 2 | 0 | 0 |
| OKLAHOMA | 0 | 0 | 0 | 1 |
| TEXAS | 1 | 5 | 1 | 1 |
| NEW MEXICO | 0 | 0 | 2 | 0 |

## TABLE I-6 : (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION VI | 2 | 0 | 2 | 17 |
| ARKANSAS | 0 | 0 | 0 | 0 |
| LOUISIANA | 0 | 0 | 0 | 2 |
| OKLAHOMA | 0 | 0 | 0 | 1 |
| TEXAS | 2 | 0 | 2 | 12 |
| NEW MEXICO | 0 | 0 | 0 | 2 |

## TABLE I-7

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMER | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION VII | 0 | 0 | 3 | 1 |
| IOWA | 0 | 0 | 1 | 0 |
| MISSOURI | 0 | 0 | 0 | 0 |
| NEBRASKA | 0 | 0 | 1 | 0 |
| KANSAS | 0 | 0 | 1 | 1 |

## TABLE I-7 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN OR NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION VII | 0 | 0 | 1 | 5 |
| IOWA | 0 | 0 | 1 | 2 |
| MISSOURI | 0 | 0 | 0 | 0 |
| NEBRASKA | 0 | 0 | 0 | 1 |
| KANSAS | 0 | 0 | 0 | 2 |

## TABLE I-8

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMER | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION VIII | 0 | 1 | 0 | 2 |
| NORTH DAKOTA | 0 | 0 | 0 | 1 |
| SOUTH DAKOTA | 0 | 0 | 0 | 0 |
| MONTANA | 0 | 0 | 0 | 0 |
| WYOMING | 0 | 0 | 0 | 0 |
| COLORADO | 0 | 1 | 0 | 0 |
| UTAH | 0 | 0 | 0 | 1 |

## TABLE I-8 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN OR NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION VIII | 0 | 0 | 0 | 3 |
| NORTH DAKOTA | 0 | 0 | 0 | 1 |
| SOUTH DAKOTA | 0 | 0 | 0 | 0 |
| MONTANA | 0 | 0 | 0 | 0 |
| WYOMING | 0 | 0 | 0 | 0 |
| COLORADO | 0 | 0 | 0 | 1 |
| UTAH | 0 | 0 | 0 | 1 |

## TABLE I-9

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMER | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION IX | 6 | 8 | 0 | 1 |
| CALIFORNIA | 3 | 3 | 0 | 1 |
| ARIZONA | 3 | 5 | 0 | 0 |
| NEVADA | 0 | 0 | 0 | 0 |
| HAWAII | 0 | 0 | 0 | 0 |

## TABLE I-9 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN OR NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION IX | 0 | 0 | 0 | 15 |
| CALIFORNIA | 0 | 0 | 0 | 7 |
| ARIZONA | 0 | 0 | 0 | 8 |
| NEVADA | 0 | 0 | 0 | 0 |
| HAWAII | 0 | 0 | 0 | 0 |

## TABLE I-10

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMER | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION X | 0 | 0 | 1 | 0 |
| IDAHO | 0 | 0 | 0 | 0 |
| WASHINGTON | 0 | 0 | 0 | 0 |
| OREGON | 0 | 0 | 1 | 0 |
| ALASKA | 0 | 0 | 0 | 0 |

TABLE I-10(CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1972.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN OR NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION X | 0 | 1 | 1 | 3 |
| IDAHO | 0 | 1 | 1 | 2 |
| WASHINGTON | 0 | 0 | 0 | 0 |
| OREGON | 0 | 0 | 0 | 1 |
| ALASKA | 0 | 0 | 0 | 0 |

# TABLE J

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS, BY SELECTED OCCUPATION, AND EPA REGION IN THE UNITED STATES 1973.

| REGION | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMER | AGRICULTURAL WORKER |
|---|---|---|---|---|
| I | 0 | 0 | 2 | 0 |
| II | 0 | 0 | 2 | 1 |
| III | 0 | 0 | 0 | 0 |
| IV | 6 | 8 | 10 | 6 |
| V | 1 | 3 | 1 | 0 |
| VI | 3 | 8 | 8 | 0 |
| VII | 0 | 0 | 0 | 2 |
| VIII | 0 | 0 | 4 | 0 |
| IX | 0 | 6 | 2 | 2 |
| X | 1 | 1 | 1 | 2 |
| TOTAL | 11 | 26 | 30 | 13 |

## TABLE J (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS, BY SELECTED OCCUPATION, AND EPA REGION IN THE UNITED STATES 1973.

| REGION | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN OR NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| I | 2 | 0 | 0 | 4 |
| II | 0 | 0 | 0 | 3 |
| III | 0 | 0 | 2 | 2 |
| IV | 2 | 1 | 7 | 40 |
| V | 1 | 0 | 0 | 6 |
| VI | 5 | 1 | 2 | 27 |
| VII | 1 | 0 | 1 | 4 |
| VIII | 0 | 0 | 0 | 4 |
| IX | 1 | 0 | 1 | 12 |
| X | 1 | 0 | 0 | 6 |
| TOTAL | 13 | 2 | 13 | 108 |

## TABLE K-1

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMER | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION I | 0 | 0 | 2 | 0 |
| MAINE | 0 | 0 | 2 | 0 |
| NEW HAMPSHIRE | 0 | 0 | 0 | 0 |
| VERMONT | 0 | 0 | 0 | 0 |
| MASSACHUSETTS | 0 | 0 | 0 | 0 |
| RHODE ISLAND | 0 | 0 | 0 | 0 |
| CONNECTICUT | 0 | 0 | 0 | 0 |

## TABLE K-1 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN OR NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION I | 2 | 0 | 0 | 4 |
| MAINE | 1 | 0 | 0 | 3 |
| NEW HAMPSHIRE | 0 | 0 | 0 | 0 |
| VERMONT | 0 | 0 | 0 | 0 |
| MASSACHUSETTS | 0 | 0 | 0 | 0 |
| RHODE ISLAND | 0 | 0 | 0 | 0 |
| CONNECTICUT | 1 | 0 | 0 | 1 |

## TABLE K-2

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMER | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION II | 0 | 0 | 2 | 1 |
| NEW YORK | 0 | 0 | 0 | 0 |
| NEW JERSEY | 0 | 0 | 2 | 1 |

TABLE K-2 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN OR NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION II | 0 | 0 | 0 | 3 |
| NEW YORK | 0 | 0 | 0 | 0 |
| NEW JERSEY | 0 | 0 | 0 | 3 |

## TABLE K-3

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMER | AGRICULTURAL WORKER |
|---|---|---|---|---|
| REGION III | 0 | 0 | 0 | 0 |
| PENNSYLVANIA | 0 | 0 | 0 | 0 |
| DELAWARE | 0 | 0 | 0 | 0 |
| MARYLAND | 0 | 0 | 0 | 0 |
| DISTRICT OF COLUMBIA | 0 | 0 | 0 | 0 |
| VIRGINIA | 0 | 0 | 0 | 0 |
| WEST VIRGINIA | 0 | 0 | 0 | 0 |

## TABLE K-3 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN OR NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| REGION III | 0 | 0 | 2 | 2 |
| PENNSYLVANIA | 0 | 0 | 0 | 0 |
| DELAWARE | 0 | 0 | 0 | 0 |
| MARYLAND | 0 | 0 | 0 | 0 |
| DISTRICT OF COLUMBIA | 0 | 0 | 0 | 0 |
| VIRGINIA | 0 | 0 | 2 | 2 |
| WEST VIRGINIA | 0 | 0 | 0 | 0 |

TABLE K-4

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMER | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION IV | 6 | 8 | 10 | 6 |
| NORTH CAROLINA | 0 | 0 | 4 | 2 |
| SOUTH CAROLINA | 0 | 0 | 0 | 2 |
| GEORGIA | 6 | 2 | 3 | 1 |
| FLORIDA | 0 | 6 | 0 | 1 |
| KENTUCKY | 0 | 0 | 1 | 0 |
| TENNESSEE | 0 | 0 | 1 | 0 |
| ALABAMA | 0 | 0 | 1 | 0 |
| MISSISSIPPI | 0 | 0 | 0 | 0 |

TABLE K-4 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN OR NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION IV | 2 | 1 | 7 | 40 |
| NORTH CAROLINA | 0 | 0 | 4 | 10 |
| SOUTH CAROLINA | 0 | 0 | 0 | 2 |
| GEORGIA | 0 | 1 | 3 | 16 |
| FLORIDA | 1 | 0 | 0 | 8 |
| KENTUCKY | 0 | 0 | 0 | 1 |
| TENNESSEE | 0 | 0 | 0 | 1 |
| ALABAMA | 1 | 0 | 0 | 2 |
| MISSISSIPPI | 0 | 0 | 0 | 0 |

TABLE K-5

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

|  | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMER | AGRICULTURAL WORKER |
|---|---|---|---|---|
|  | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION V | 1 | 3 | 1 | 0 |
| OHIO | 0 | 0 | 0 | 0 |
| INDIANA | 0 | 1 | 0 | 0 |
| ILLINOIS | 1 | 1 | 1 | 0 |
| MICHIGAN | 0 | 1 | 0 | 0 |
| WISCONSIN | 0 | 0 | 0 | 0 |
| MINNESOTA | 0 | 0 | 0 | 0 |

TABLE K-5 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN OR NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION V | 1 | 0 | 0 | 6 |
| OHIO | 0 | 0 | 0 | 0 |
| INDIANA | 0 | 0 | 0 | 1 |
| ILLINOIS | 1 | 0 | 0 | 4 |
| MICHIGAN | 0 | 0 | 0 | 1 |
| WISCONSIN | 0 | 0 | 0 | 0 |
| MINNESOTA | 0 | 0 | 0 | 0 |

TABLE K-6

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMER | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION VI | 3 | 8 | 8 | 0 |
| ARKANSAS | 0 | 0 | 0 | 0 |
| LOUISIANA | 0 | 2 | 0 | 0 |
| OKLAHOMA | 0 | 0 | 1 | 0 |
| TEXAS | 3 | 6 | 6 | 0 |
| NEW MEXICO | 0 | 0 | 1 | 0 |

TABLE K-6 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN OR NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION VI | 5 | 1 | 2 | 27 |
| ARKANSAS | 0 | 0 | 0 | 0 |
| LOUISIANA | 1 | 0 | 0 | 3 |
| OKLAHOMA | 0 | 1 | 0 | 2 |
| TEXAS | 4 | 0 | 2 | 21 |
| NEW MEXICO | 0 | 0 | 0 | 1 |

TABLE K-7

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMER | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION VII | 0 | 0 | 0 | 2 |
| IOWA | 0 | 0 | 0 | 0 |
| MISSOURI | 0 | 0 | 0 | 1 |
| NEBRASKA | 0 | 0 | 0 | 0 |
| KANSAS | 0 | 0 | 0 | 1 |

TABLE K-7 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN OR NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION VII | 1 | 0 | 1 | 4 |
| IOWA | 0 | 0 | 0 | 0 |
| MISSOURI | 1 | 0 | 0 | 2 |
| NEBRASKA | 0 | 0 | 1 | 1 |
| KANSAS | 0 | 0 | 0 | 1 |

TABLE K-8

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMER | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION VIII | 0 | 0 | 4 | 0 |
| NORTH DAKOTA | 0 | 0 | 2 | 0 |
| SOUTH DAKOTA | 0 | 0 | 1 | 0 |
| MONTANA | 0 | 0 | 0 | 0 |
| WYOMING | 0 | 0 | 0 | 0 |
| COLORADO | 0 | 0 | 0 | 0 |
| UTAH | 0 | 0 | 1 | 0 |

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## TABLE K-8 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN OR NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION VIII | 0 | 0 | 0 | 4 |
| NORTH DAKOTA | 0 | 0 | 0 | 2 |
| SOUTH DAKOTA | 0 | 0 | 0 | 1 |
| MONTANA | 0 | 0 | 0 | 0 |
| WYOMING | 0 | 0 | 0 | 0 |
| COLORADO | 0 | 0 | 0 | 0 |
| UTAH | 0 | 0 | 0 | 1 |

TABLE K-9

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMER | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION IX | 0 | 6 | 2 | 2 |
| CALIFORNIA | 0 | 2 | 2 | 1 |
| ARIZONA | 0 | 4 | 0 | 0 |
| NEVADA | 0 | 0 | 0 | 0 |
| HAWAII | 0 | 0 | 0 | 1 |

## TABLE K-9 (CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN OR NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| REGION IX | 1 | 0 | 1 | 12 |
| CALIFORNIA | 0 | 0 | 1 | 6 |
| ARIZONA | 1 | 0 | 0 | 5 |
| NEVADA | 0 | 0 | 0 | 0 |
| HAWAII | 0 | 0 | 0 | 1 |

## TABLE K-10

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | PESTICIDE FORMULATING PLANT OR PESTICIDE MANUFACTURING PLANT | COMMERCIAL APPLICATOR | FARMER | AGRICULTURAL WORKER |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION X | 1 | 1 | 1 | 2 |
| IDAHO | 1 | 1 | 0 | 1 |
| WASHINGTON | 0 | 0 | 0 | 1 |
| OREGON | 0 | 0 | 1 | 0 |
| ALASKA | 0 | 0 | 0 | 0 |

TABLE K-10(CONTINUED)

OBSERVED NUMBER OF HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY SELECTED OCCUPATION, AND EPA REGIONS AND STATES IN 1973.

| | SKILLED OR UNSKILLED LABORER | PROFESSIONAL OR SEMI-PROFESSIONAL | UNKNOWN OR NOT CLASSIFIED | TOTAL |
|---|---|---|---|---|
| | OBSERVED | OBSERVED | OBSERVED | OBSERVED |
| REGION X | 1 | 0 | 0 | 6 |
| IDAHO | 1 | 0 | 0 | 4 |
| WASHINGTON | 0 | 0 | 0 | 1 |
| OREGON | 0 | 0 | 0 | 1 |
| ALASKA | 0 | 0 | 0 | 0 |

## TABLE L-1

NUMBER OF OBSERVED HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY MAJOR PESTICIDE CLASS IN 1971, 1972, AND 1973.

| | 1971 | 1972 | 1973 |
|---|---|---|---|
| ORGANOPHOSPHATES | 74 | 60 | 70 |
| CHLORINATED HYDROCARBON INSECTICIDES | 5 | 9 | 13 |
| CHLORINATED HYDROCARBON HERBICIDES, FUNGICIDES, ETC. | 5 | 4 | 5 |
| CARBAMATES, AMIDES & RELATED COMPOUNDS | 7 | 5 | 12 |
| ARSENIC | 3 | 1 | 1 |
| OTHER | 6 | 2 | 7 |
| TOTAL | 100 | 81 | 108 |

## TABLE M-1

NUMBER OF OBSERVED HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY MAJOR PESTICIDE CLASS, EPA REGIONS, 1971.

| REGION | ORGANOPHOSPHATES | CHLORINATED HYDROCARBON INSECTICIDES | CHLORINATED HYDROCARBON HERBICIDES FUNGICIDES, ETC. | CARBAMATES, AMIDES & RELATED COMPOUNDS | ARSENIC | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|
| I | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| II | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| III | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| IV | 32 | 1 | 3 | 4 | 2 | 2 | 44 |
| V | 3 | 0 | 1 | 0 | 0 | 0 | 4 |
| VI | 24 | 1 | 1 | 0 | 1 | 1 | 28 |
| VII | 3 | 1 | 0 | 0 | 0 | 0 | 4 |
| VIII | 0 | 2 | 0 | 0 | 0 | 1 | 3 |
| IX | 9 | 0 | 0 | 2 | 0 | 0 | 11 |
| X | 2 | 0 | 0 | 1 | 0 | 1 | 4 |
| TOTAL | 74 | 5 | 5 | 7 | 3 | 6 | 100 |

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## TABLE M-2

NUMBER OF OBSERVED HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY MAJOR PESTICIDE CLASS, EPA REGIONS, 1972.

| REGION | ORGANOPHOSPHATES | CHLORINATED HYDROCARBON INSECTICIDES | CHLORINATED HYDROCARBON HERBICIDES FUNGICIDES, ETC. | CARBAMATES, AMIDES & RELATED COMPOUNDS | ARSENIC | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|
| I | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| II | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| III | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| IV | 23 | 5 | 1 | 1 | 1 | 0 | 31 |
| V | 3 | 0 | 1 | 0 | 0 | 0 | 4 |
| VI | 11 | 2 | 1 | 1 | 0 | 2 | 17 |
| VII | 2 | 1 | 1 | 1 | 0 | 0 | 5 |
| VIII | 2 | 0 | 0 | 1 | 0 | 0 | 3 |
| IX | 14 | 0 | 0 | 1 | 0 | 0 | 15 |
| X | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| TOTAL | 60 | 9 | 4 | 5 | 1 | 2 | 81 |

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## TABLE M-3

NUMBER OF OBSERVED HOSPITAL ADMITTED OCCUPATIONAL PESTICIDE POISONINGS BY MAJOR PESTICIDE CLASS, EPA REGIONS, 1973.

| REGION | ORGANOPHOSPHATES | CHLORINATED HYDROCARBON INSECTICIDES | CHLORINATED HYDROCARBON HERBICIDES FUNGICIDES, ETC. | CARBAMATES, AMIDES & RELATED COMPOUNDS | ARSENIC | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|
| I | 1 | 2 | 0 | 1 | 0 | 0 | 4 |
| II | 2 | 0 | 0 | 1 | 0 | 0 | 3 |
| III | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| IV | 23 | 7 | 3 | 7 | 0 | 0 | 40 |
| V | 4 | 0 | 1 | 1 | 0 | 0 | 6 |
| VI | 19 | 3 | 1 | 2 | 0 | 2 | 27 |
| VII | 1 | 1 | 0 | 0 | 0 | 2 | 4 |
| VIII | 3 | 0 | 0 | 0 | 0 | 1 | 4 |
| IX | 10 | 0 | 0 | 0 | 1 | 1 | 12 |
| X | 5 | 0 | 0 | 0 | 0 | 1 | 6 |
| TOTAL | 70 | 13 | 5 | 12 | 1 | 7 | 108 |

## TABLE N-1

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS BY AGE GROUP, AND EPA REGION IN THE UNITED STATES, 1971.

| AGE GROUP | I | II | III | IV | V | VI | VII | VIII | IX | X | U.S. TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-4 | 3 | 3 | 13 | 17 | 36 | 13 | 6 | 2 | 31 | 3 | 127 |
| 5-9 | 0 | 0 | 6 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 9 |
| 10-14 | 0 | 0 | 0 | 3 | 1 | 4 | 0 | 1 | 2 | 1 | 12 |
| 15-19 | 0 | 0 | 0 | 9 | 3 | 8 | 0 | 0 | 11 | 4 | 35 |
| 20-24 | 0 | 0 | 0 | 3 | 2 | 4 | 2 | 1 | 10 | 0 | 22 |
| 25-34 | 1 | 1 | 1 | 14 | 3 | 6 | 2 | 1 | 13 | 0 | 42 |
| 35-44 | 1 | 0 | 1 | 12 | 3 | 7 | 2 | 0 | 8 | 1 | 35 |
| 45-54 | 0 | 1 | 0 | 6 | 1 | 5 | 0 | 0 | 5 | 1 | 19 |
| 55-64 | 0 | 0 | 0 | 9 | 0 | 4 | 0 | 1 | 7 | 0 | 21 |
| 65 + | 0 | 0 | 2 | 4 | 0 | 2 | 2 | 0 | 1 | 1 | 12 |
| UNKNOWN | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |
| U.S. TOTAL | 5 | 5 | 24 | 78 | 50 | 54 | 14 | 6 | 89 | 11 | 336 |

## TABLE N-2

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS BY AGE GROUP, AND EPA REGION IN THE UNITED STATES, 1972.

| AGE GROUP | I | II | III | IV | V | VI | VII | VIII | IX | X | U.S. TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-4 | 4 | 4 | 24 | 25 | 39 | 16 | 8 | 2 | 28 | 6 | 156 |
| 5-9 | 0 | 1 | 1 | 4 | 0 | 1 | 1 | 0 | 2 | 0 | 10 |
| 10-14 | 0 | 0 | 0 | 7 | 1 | 5 | 1 | 0 | 0 | 0 | 14 |
| 15-19 | 0 | 0 | 1 | 4 | 5 | 6 | 0 | 1 | 8 | 1 | 26 |
| 20-24 | 0 | 1 | 2 | 6 | 2 | 5 | 1 | 1 | 15 | 0 | 33 |
| 25-34 | 0 | 2 | 5 | 12 | 1 | 5 | 2 | 0 | 11 | 0 | 38 |
| 35-44 | 1 | 1 | 2 | 11 | 4 | 2 | 0 | 1 | 8 | 1 | 31 |
| 45-54 | 0 | 1 | 2 | 6 | 2 | 4 | 3 | 0 | 6 | 1 | 25 |
| 55-64 | 0 | 0 | 0 | 3 | 0 | 3 | 1 | 1 | 2 | 1 | 11 |
| 65 + | 0 | 0 | 3 | 7 | 2 | 3 | 1 | 3 | 3 | 2 | 24 |
| UNKNOWN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| U.S. TOTAL | 5 | 10 | 40 | 85 | 56 | 50 | 18 | 9 | 83 | 12 | 368 |

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TABLE N-3

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS BY AGE GROUP, AND EPA REGION IN THE UNITED STATES, 1973.

| AGE GROUP | I | II | III | IV | V | VI | VII | VIII | IX | X | U.S. TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-4 | 1 | 5 | 9 | 15 | 36 | 9 | 10 | 2 | 39 | 4 | 130 |
| 5-9 | 2 | 0 | 3 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 8 |
| 10-14 | 1 | 0 | 3 | 5 | 1 | 6 | 0 | 1 | 0 | 0 | 17 |
| 15-19 | 3 | 2 | 3 | 13 | 4 | 11 | 5 | 1 | 6 | 1 | 49 |
| 20-24 | 0 | 0 | 2 | 9 | 3 | 5 | 0 | 1 | 7 | 2 | 29 |
| 25-34 | 1 | 0 | 1 | 4 | 2 | 13 | 3 | 1 | 8 | 4 | 37 |
| 35-44 | 1 | 1 | 0 | 13 | 2 | 4 | 2 | 1 | 10 | 2 | 36 |
| 45-54 | 0 | 1 | 0 | 7 | 3 | 3 | 3 | 1 | 4 | 2 | 24 |
| 55-64 | 0 | 0 | 2 | 6 | 4 | 3 | 0 | 0 | 3 | 0 | 18 |
| 65 + | 0 | 0 | 3 | 0 | 2 | 2 | 3 | 1 | 4 | 5 | 20 |
| UNKNOWN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| U.S. TOTAL | 9 | 9 | 26 | 72 | 59 | 57 | 26 | 9 | 81 | 20 | 368 |

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## TABLE O-1

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS FOR CHILDREN 0-4 YEARS OF AGE IN THE UNITED STATES IN 1971, 1972, AND 1973.

| YEAR | OBSERVED NUMBER |
|---|---|
| 1971 | 127 |
| 1972 | 156 |
| 1973 | 130 |
| TOTAL | 413 |

## TABLE P-1

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS FOR CHILDREN 0-4 YEARS OF AGE, EPA REGIONS IN 1971, 1972, AND 1973.

| EPA REGION | 1971 OBSERVED NUMBER | 1972 OBSERVED NUMBER | 1973 OBSERVED NUMBER |
|---|---|---|---|
| I | 3 | 4 | 1 |
| II | 3 | 4 | 5 |
| III | 13 | 24 | 9 |
| IV | 17 | 25 | 15 |
| V | 36 | 39 | 36 |
| VI | 13 | 16 | 9 |
| VII | 6 | 8 | 10 |
| VIII | 2 | 2 | 2 |
| IX | 31 | 28 | 39 |
| X | 3 | 6 | 4 |

## TABLE Q-1

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS FOR CHILDREN 0-4 YEARS OF AGE, EPA REGION AND STATES, 1971, 1972, AND 1973.

| REGION AND STATE | 1971 | 1972 | 1973 |
|---|---|---|---|
| REGION I | 3 | 4 | 1 |
| MAINE | 0 | 2 | 0 |
| NEW HAMPSHIRE | 0 | 0 | 0 |
| VERMONT | 0 | 0 | 0 |
| MASSACHUSETTS | 1 | 2 | 1 |
| RHODE ISLAND | 0 | 0 | 0 |
| CONNECTICUT | 2 | 0 | 0 |

TABLE Q-2

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS FOR CHILDREN 0-4 YEARS OF AGE, EPA REGION II AND STATES, 1971, 1972, AND 1973.

| REGION AND STATE | 1971 | 1972 | 1973 |
|---|---|---|---|
| REGION II | 3 | 4 | 5 |
| NEW YORK | 2 | 2 | 4 |
| NEW JERSEY | 1 | 2 | 1 |

## TABLE Q-3

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS FOR CHILDREN 0-4 YEARS OF AGE, EPA REGION III AND STATES, 1971, 1972, AND 1973.

| REGION AND STATE | 1971 | 1972 | 1973 |
|---|---|---|---|
| REGION III | 13 | 24 | 9 |
| PENNSYLVANIA | 5 | 7 | 6 |
| DELAWARE | 2 | 0 | 0 |
| MARYLAND | 2 | 1 | 0 |
| DISTRICT OF COLUMBIA | 3 | 12 | 3 |
| VIRGINIA | 0 | 2 | 0 |
| WEST VIRGINIA | 1 | 2 | 0 |

## TABLE Q-4

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS FOR CHILDREN 0-4 YEARS OF AGE, EPA REGION IV AND STATES, 1971, 1972, AND 1973.

| REGION AND STATE | 1971 | 1972 | 1973 |
|---|---|---|---|
| REGION IV | 17 | 25 | 15 |
| NORTH CAROLINA | 2 | 7 | 2 |
| SOUTH CAROLINA | 0 | 1 | 2 |
| GEORGIA | 2 | 1 | 0 |
| FLORIDA | 5 | 1 | 2 |
| KENTUCKY | 3 | 6 | 2 |
| TENNESSEE | 2 | 3 | 3 |
| ALABAMA | 2 | 4 | 4 |
| MISSISSIPPI | 1 | 2 | 0 |

## TABLE Q-5

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS FOR CHILDREN 0-4 YEARS OF AGE, EPA REGION V AND STATES, 1971, 1972, AND 1973.

| REGION AND STATE | 1971 | 1972 | 1973 |
|---|---|---|---|
| REGION V | 36 | 39 | 36 |
| OHIO | 5 | 7 | 7 |
| INDIANA | 1 | 1 | 2 |
| ILLINOIS | 13 | 19 | 18 |
| MICHIGAN | 7 | 5 | 3 |
| WISCONSIN | 4 | 3 | 3 |
| MINNESOTA | 6 | 4 | 3 |

## TABLE Q-6

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS FOR CHILDREN 0-4 YEARS OF AGE, EPA REGION VI AND STATES, 1971, 1972 AND 1973.

| REGION AND STATE | 1971 | 1972 | 1973 |
|---|---|---|---|
| REGION VI | 13 | 16 | 9 |
| ARKANSAS | 1 | 3 | 0 |
| LOUISIANA | 3 | 3 | 0 |
| OKLAHOMA | 1 | 0 | 0 |
| TEXAS | 7 | 9 | 9 |
| NEW MEXICO | 1 | 1 | 0 |

## TABLE Q-7

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS FOR CHILDREN 0-4 YEARS OF AGE, EPA REGION VII AND STATES, 1971, 1972, AND 1973.

| REGION AND STATE | 1971 | 1972 | 1973 |
|---|---|---|---|
| REGION VII | 6 | 8 | 10 |
| IOWA | 2 | 3 | 2 |
| MISSOURI | 1 | 2 | 2 |
| NEBRASKA | 0 | 0 | 1 |
| KANSAS | 3 | 3 | 5 |

## TABLE Q-8

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS FOR CHILDREN 0-4 YEARS OF AGE, EPA REGION VIII AND STATES, 1971, 1972, AND 1973.

| REGION AND STATE | 1971 | 1972 | 1973 |
|---|---|---|---|
| REGION VIII | 2 | 2 | 2 |
| NORTH DAKOTA | 0 | 1 | 0 |
| SOUTH DAKOTA | 0 | 1 | 1 |
| MONTANA | 0 | 0 | 0 |
| WYOMING | 0 | 0 | 0 |
| COLORADO | 1 | 0 | 1 |
| UTAH | 1 | 0 | 0 |

## TABLE Q-9

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS FOR CHILDREN 0-4 YEARS OF AGE, EPA REGION IX AND STATES, 1971, 1972, AND 1973.

| REGION AND STATE | 1971 | 1972 | 1973 |
|---|---|---|---|
| REGION IX | 31 | 28 | 39 |
| CALIFORNIA | 30 | 26 | 36 |
| ARIZONA | 1 | 2 | 2 |
| NEVADA | 0 | 0 | 0 |
| HAWAII | 0 | 0 | 1 |

## TABLE Q-10

OBSERVED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS FOR CHILDREN 0-4 YEARS OF AGE, EPA REGION X AND STATES, 1971, 1972, AND 1973.

| REGION AND STATE | 1971 | 1972 | 1973 |
|---|---|---|---|
| REGION X | 3 | 6 | 4 |
| IDAHO | 0 | 0 | 1 |
| WASHINGTON | 2 | 3 | 1 |
| OREGON | 1 | 3 | 2 |
| ALASKA | 0 | 0 | 0 |

## TABLE R-1

TOTAL OBSERVED NUMBERS OF HOSPITAL ADMITTED PESTICIDE POISONING DEATHS BY AGE GROUP AND CHEMICAL CLASS IN THE UNITED STATES FOR 1971 - 1973.

| AGE GROUP | ARSENIC | CHLORINATED HYDROCARBON INSECTICIDE | ORGANO PHOSPHATE | INORGANICS | CHLORINATED HYDROCARBON HERBICIDES | BOTANICAL | FLUORINATED PESTICIDE | MERCURY | U.S. TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| 0-4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5-9 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 10-14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15-19 | 3 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 4 |
| 20-24 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 |
| 25-34 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 4 |
| 35-44 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| 45-54 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| 55-64 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| 65 + | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| U.S. TOTAL | 7 | 6 | 3 | 3 | 1 | 1 | 1 | 1 | 23 |

## TABLE R-2

OBSERVED NUMBERS OF HOSPITAL ADMITTED PESTICIDE POISONING DEATHS IN THE NON-OCCUPATIONAL GROUP, BY AGE GROUP AND CHEMICAL CLASS IN THE UNITED STATES FOR 1971 - 1973.

| AGE GROUP | ARSENIC | CHLORINATED HYDROCARBON INSECTICIDE | ORGANO PHOSPHATE | INORGANICS | CHLORINATED HYDROCARBON HERBICIDE | BOTANICAL | FLUORINATED PESTICIDE | MERCURY | U.S. TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| 0-4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5-9 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 10-14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15-19 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 20-24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25-34 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 35-44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 45-54 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 55-64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65 + | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| U.S. TOTAL | 3 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 6 |

TABLE R-3

OBSERVED NUMBERS OF HOSPITAL ADMITTED PESTICIDE POISONING DEATHS IN THE INTENTIONAL GROUP, BY AGE GROUP, AND CHEMICAL CLASS IN THE UNITED STATES 1971 - 1973.

| AGE GROUP | ARSENIC | CHLORINATED HYDROCARBON INSECTICIDE | ORGANO PHOSPHATE | INORGANICS | CHLORINATED HYDROCARBON HERBICIDE | BOTANICAL | FLUORINATED PESTICIDE | MERCURY | U.S. TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| 0-4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5-9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10-14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15-19 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 |
| 20-24 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 |
| 25-34 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| 35-44 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| 45-54 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| 55-64 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| 65 + | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| U.S. TOTAL | 4 | 3 | 2 | 3 | 1 | 1 | 0 | 1 | 15 |

## TABLE S-1

## STANDARD ERROR OF ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1973 BY EPA REGION AND STATE.

| REGION AND STATE | STANDARD ERROR |
|---|---|
| REGION I | 26.5 |
| MAINE | 8.2 |
| NEW HAMPSHIRE | 0 |
| VERMONT | 0 |
| MASSACHUSETTS | 23.2 |
| RHODE ISLAND | 0 |
| CONNECTICUT | 9.6 |

## TABLE S-2

STANDARD ERROR OF ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1973 BY EPA REGION AND STATE.

| REGION AND STATE | STANDARD ERROR |
|---|---|
| REGION II | 26.4 |
| NEW YORK | 0.8 |
| NEW JERSEY | 17.2 |

## TABLE S-3

STANDARD ERROR OF ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1973 BY EPA REGION AND STATE.

| REGION AND STATE | STANDARD ERROR |
|---|---|
| REGION III | 38.9 |
| PENNSYLVANIA | 31.3 |
| DELAWARE | * |
| MARYLAND | 3.2 |
| DISTRICT OF COLUMBIA | 4.4 |
| VIRGINIA | 19.3 |
| WEST VIRGINIA | 0 |

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*NO STANDARD ERROR COULD BE DETERMINED FOR THIS STATE BECAUSE ALL OF THE OBSERVED POISONINGS IN DELAWARE WERE IDENTIFIED IN ONE HOSPITAL.

### TABLE S-4

### STANDARD ERROR OF ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1973 BY EPA REGION AND STATE.

| REGION AND STATE | STANDARD ERROR |
|---|---|
| REGION IV | 87.8 |
| NORTH CAROLINA | 4.7 |
| SOUTH CAROLINA | 2.3 |
| GEORGIA | 7.4 |
| FLORIDA | 3.4 |
| KENTUCKY | 1.9 |
| TENNESSEE | 2.7 |
| ALABAMA | 2.9 |
| MISSISSIPPI | 1.5 |

TABLE S-5

STANDARD ERROR OF ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1973 BY EPA REGION AND STATE.

| REGION AND STATE | STANDARD ERROR |
|---|---|
| REGION V | 77.4 |
| OHIO | 31.7 |
| INDIANA | 9.3 |
| ILLINOIS | 61.0 |
| MICHIGAN | 22.3 |
| WISCONSIN | 13.1 |
| MINNESOTA | 18.9 |

## TABLE S-6

STANDARD ERROR OF ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1973 BY EPA REGION AND STATE.

| REGION AND STATE | STANDARD ERROR |
|---|---|
| REGION VI | 121.2 |
| ARKANSAS | 0 |
| LOUISIANA | 3.8 |
| OKLAHOMA | 17.2 |
| TEXAS | 117.1 |
| NEW MEXICO | 3.8 |

## TABLE S-7

### STANDARD ERROR OF ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1973 BY EPA REGION AND STATE.

| REGION AND STATE | STANDARD ERROR |
|---|---|
| REGION VII | 92.9 |
| IOWA | 12.9 |
| MISSOURI | 27.2 |
| NEBRASKA | 11.5 |
| KANSAS | 27.2 |

## TABLE S-8

STANDARD ERROR OF ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1973 BY EPA REGION AND STATE.

| REGION AND STATE | STANDARD ERROR |
|---|---|
| REGION VIII | 24.8 |
| NORTH DAKOTA | 7.0 |
| SOUTH DAKOTA | 8.9 |
| MONTANA | 0 |
| WYOMING | 0 |
| COLORADO | 21.1 |
| UTAH | 3.5 |

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## TABLE S-9

STANDARD ERROR OF ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1973 BY EPA REGION AND STATE.

| REGION AND STATE | STANDARD ERROR |
|---|---|
| REGION IX | 123.0 |
| CALIFORNIA | 117.8 |
| ARIZONA | 34.7 |
| NEVADA | 0 |
| HAWAII | 7.2 |

## TABLE S-10

### STANDARD ERROR OF ESTIMATED NUMBER OF HOSPITAL ADMITTED PESTICIDE POISONINGS IN 1973 BY EPA REGION AND STATE.

| REGION AND STATE | STANDARD ERROR |
|---|---|
| REGION X | 37.4 |
| IDAHO | 20.0 |
| WASHINGTON | 21.3 |
| OREGON | 23.0 |
| ALASKA | 0 |